


# INFO

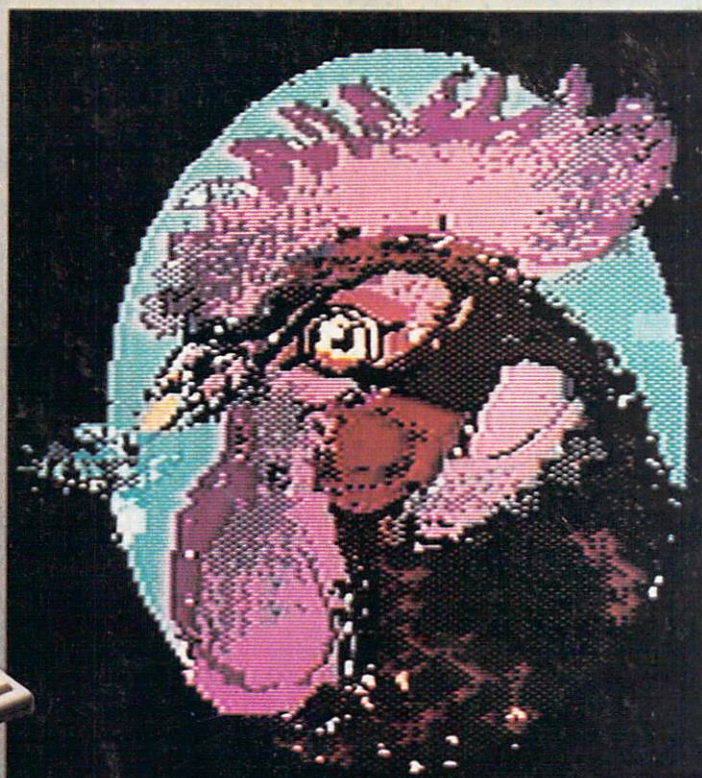
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Buyers' Guide to over  
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Includes C128 & Amiga!

## GRAPHICS CONTEST WINNERS!



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personal computing!

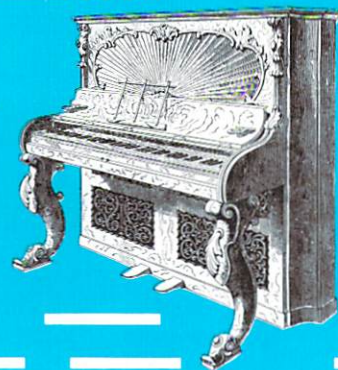


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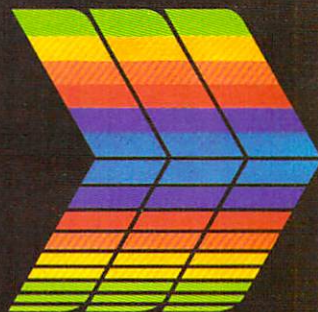
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the **USEFUL** guide to  
Commodore Computing



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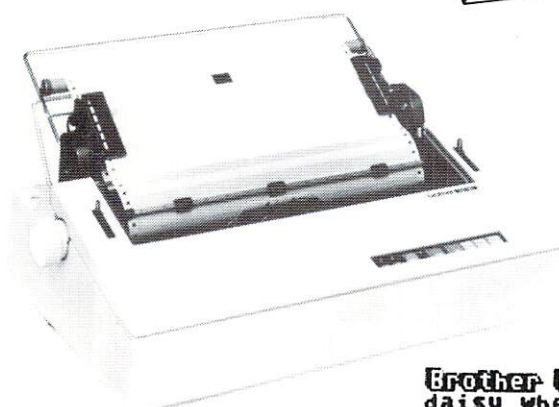
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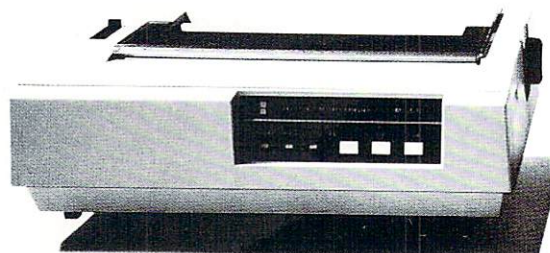
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# INFO

**CONTENTS # 8 Sept/Oct 1985**

## DEPARTMENTS

GALLERY (Exclusive color screen shots of new AMIGA software).....	6
EDITOR'S PAGE.....	7
READER MAIL.....	8
NEWS & VIEWS.....	13
SOUND ADVICE (Network Wars).....	15

## FEATURES

GRAPHICS CONTEST WINNERS (Sensational art from talented INFO readers!)..	4
AMIGA IN PICTURES (6-page eye-full).....	16
AMIGA VS IBM (No Contest).....	22
AMIGA- THINGS TO LOVE (& things we'd love to see).....	24
AMIGA QUOTES: THE GOOD, THE BAD, THE UGLY.....	28
READER ROUNDUP BALLOT (Your chance to contribute to the Product Roundup)	34
PRODUCT ROUNDUP (Over 1200 products for the C64, C128, CP/M, & AMIGA !).	35
VENDOR INDEX (A guide to who makes those 1200+ products).....	128

## ETC.

BRIAN REDMAN (computer humor).....	12
GIANT READER SURVEY (Let INFO & Mfctrs. know where you stand !).....	CF
CONTEST (The national most outrageous computer-room search!).....	135
DEALER INDEX (Where to find INFO in your area).....	148
SUBSCRIPTION FORM (Or use the removable centerfold envelope.).....	153
ADVERTISER INDEX.....	155

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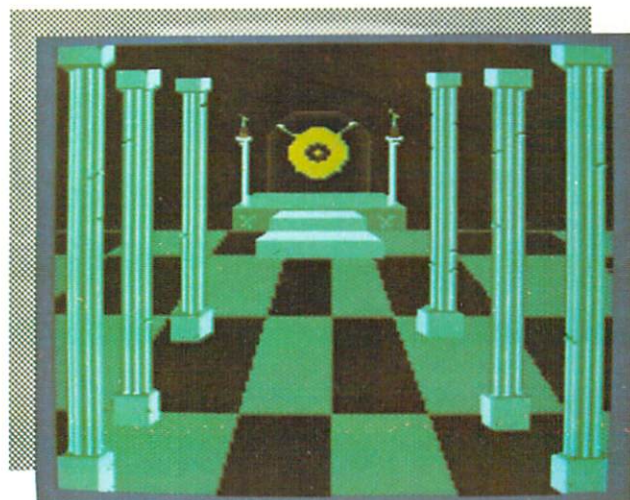
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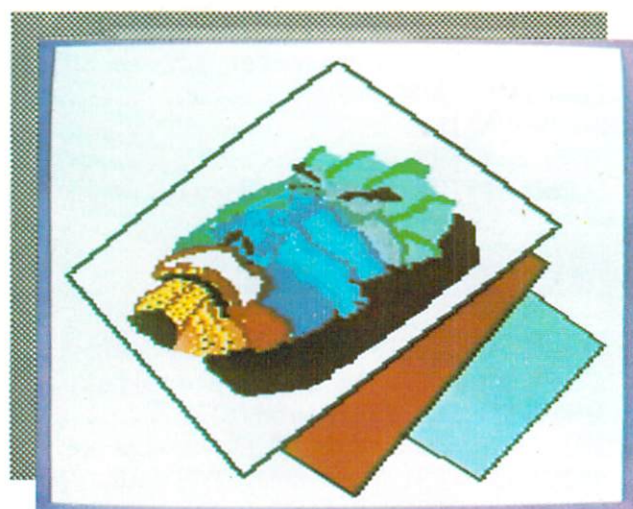
**Columns** Koala Painter  
by: Gary Herbst age:19  
Crestwood, MO

**Knards** Koala Painter  
by: Carl Olsen age:15  
Vashon, WA

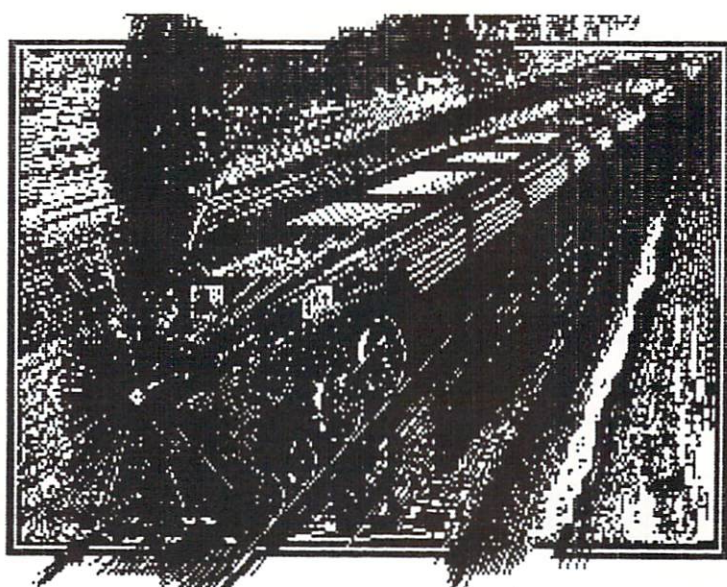
**Floating Face** Koala Painter  
by: karsten Lorentzen age:15  
Vashon, WA

**Self Portrait** FlexiDraw  
by: Peter T. Hughes age:23  
Canton, MA

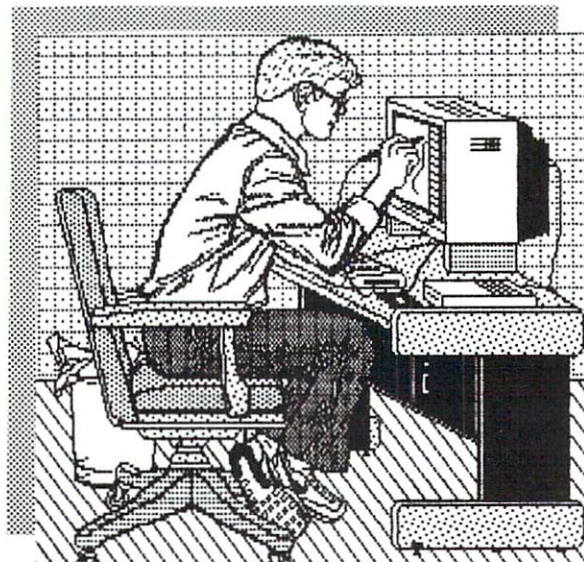
**NightTrain** Doodle  
by: Alan Cain age:34  
Springfield, MO



FLOATING FACE



NIGHTTRAIN

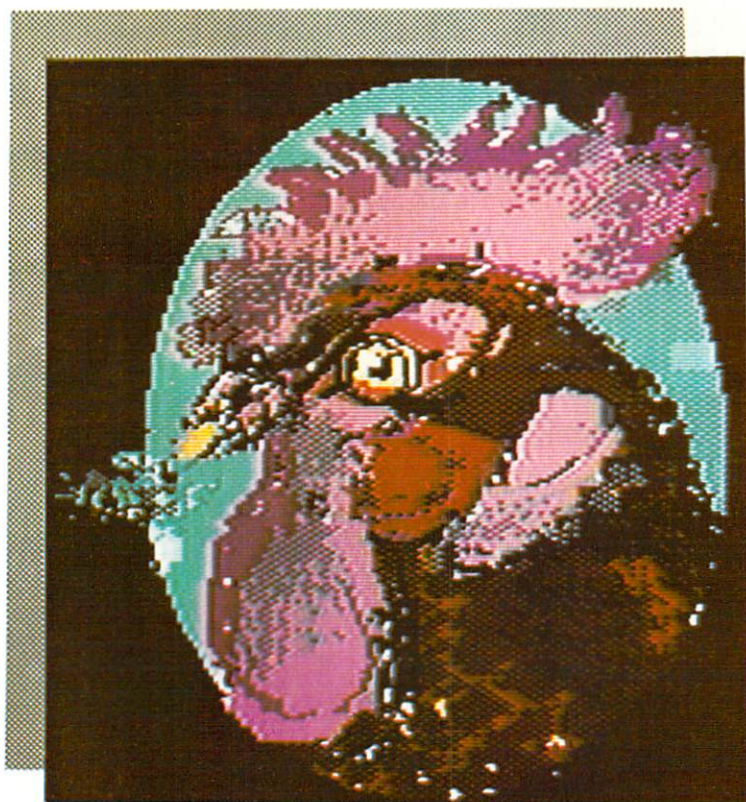


SELF-PORTRAIT





# THE WINNER IS...



## DE-BUGGER

by: Lewis Tilley      Age: 64  
of: Parrott, Georgia  
using: Animation Station



### INFO GRAPHICS CONTEST

We received many excellent entries from all over the country, and had one heck of a time picking the winners! Thanks to all of you who sent us your work. We got a lot of Garfield's and other cartoon characters which we had to rule out for copyright reasons. We also got some great nudes which were appreciated but also ruled out. If you didn't win, don't be discouraged- we will be doing this again.

← honorable mention: james murphy  
FlexiDraw / age: 23  
Chanhassen MN



# INFO



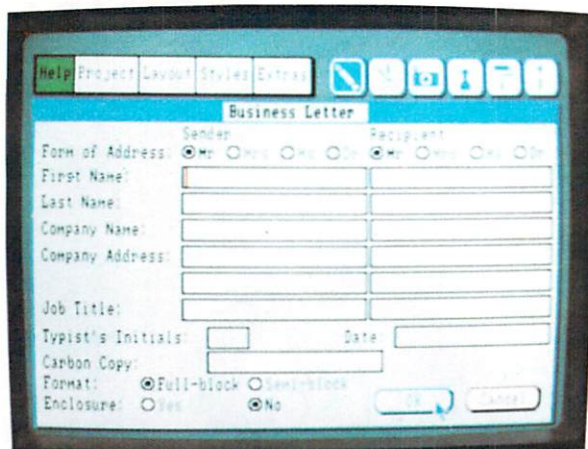


# AMIGA!

# GALLERY



**THE AMIGA EYE**  
A-Squared



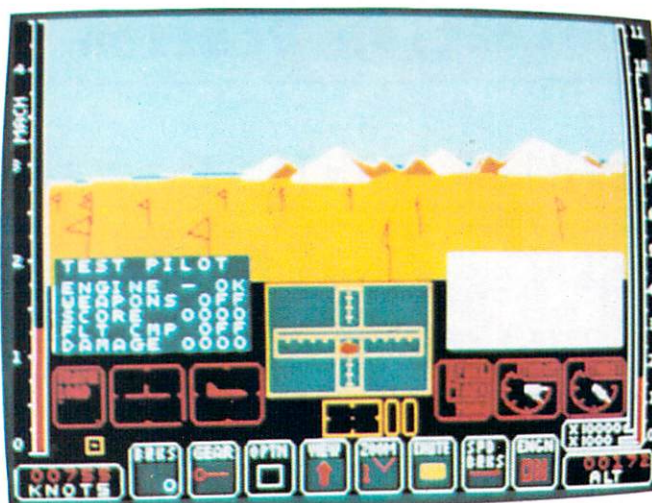
**TEXTCRAFT**  
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Electronic Arts







EDITOR'S PAGE  
—Benn Dunnington



Welcome to the first issue of INFO! We continue to grow, to change, to evolve, to be behind schedule. As always we hope that this issue will have something to delight or stimulate Commodore enthusiasts of all persuasions. We have exclusive photos, controversy, humor, valuable reference material, group participation features, user-generated works of art, brash predictions, deep insightful articles, golden prose, and much much more. We feel that this is the best issue of INFO ever, with better things yet to come.

You will also notice our cover price and subscription rates have jumped up considerably. With our knack for knocking off advertisers with blunt and critical commentary and reviews (when deserved) we find that we must actually make a profit with issue sales (something most magazines never dream of). We have also increased our size, color, number of illustrations, and paper quality (all extra costs). We are hoping that you feel, as we do, that quality and integrity are worth the extra 65 cents per issue. I'm sure you'll let us know if you disagree.

Speaking of "letting us know"; we have included a reader survey form in Issue #8 (in place of the usual Erg-Card) which we hope you will take the time to fill out and mail (Erg-Cards on card-stock will return here next issue.) We hope the information gained will not only be of interest to our readers (what IS the most popular wordprocessor), but will help us effectively communicate your views and positions to Commodore and to third party vendors. The survey will also allow us to show potential advertisers what kind of clout our readership represents; which should in turn result in improved advertising input (which will help us hold or even reduce our cover price in the future.).

While we've got you filling in blanks, you may want to note the Reader Consensus Ballot on page 34 which allows readers to participate in the rating and review process for the next product roundup issue.

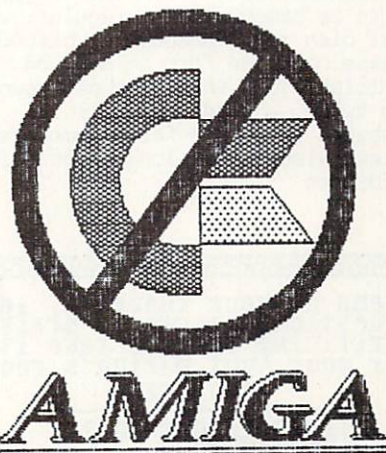
A word about our schedule, and subscriptions: We intend to make every third issue of INFO a Product Roundup issue (like this one). If we can get tight on our bi-monthly frequency, that will mean 2 roundups per year (one every six months). Regardless of our success at regularity, you will always get the total number of issues you have subscribed for (ie: a 2 yr. subscription gets you 12 issues, even if it should take longer than 2 years to produce those 12 issues.) Actually, with Mark Brown's full-time contribution to INFO, we are optimistic that we can soon be coming to you like clockwork. (we are even considering a supplemental news publication to distribute between regular issues- more on this as things develop.)

You may notice that we concentrated quite heavily on the AMIGA this issue. The AMIGA is new, it's exciting, it's important, and it's made by Commodore: so we'll be covering it along with the C-64, the C-128, and anything else significant that Commodore brings to market. Here's where your input on the reader survey will make a difference: how much (if not equal) coverage do you want us to give each machine? Tell us on the survey.

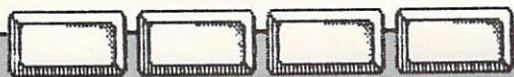
The AMIGA is, in our opinion, the most significant personal computer to ever see daylight. Commodore was darn lucky to win her, and as a result, should have no trouble becoming THE dominant force in personal computing-period. This is no small miracle, because Commodore still seems to delight in periodically doing things that would kill a company with a lesser product. For instance, we have been astounded at Commodore's treatment of both dealers and publications in the process of bringing the AMIGA to market. It is no secret that Commodore went around all of the Commodore specific magazines, and gave exclusive first access to the AMIGA to the likes of BYTE and Personal Computing (magazines that have traditionally given Commodore the cryogenic shoulder). Commodore explains that they feel the AMIGA is a powerful business machine, and doesn't fit in with the traditional Commodore framework. They seem to think that C64 owners will either not be able to handle & understand all this power, or that they simply won't be able to afford it (they forget that many of us bought 64's at \$595 when \$595 went alot more than it does today!) Many Commodore dealers we have interviewed have run into the same peculiar type of self-chauvinism from Commodore when trying to get set up as AMIGA dealers: in many cases we were told that while the dealer had had to BEG an AMIGA rep to even show them an AMIGA, an Apple or IBM dealer around the corner had been sought-out by Commodore and already signed.

We feel that this is a major error in judgement and marketing savvy on Commodore's part, and is causing much unneeded bad feeling. Ironically, the AMIGA is so good, that Commodore is going to do extremely well no matter HOW they handle their affairs.

We just hope we don't see this as the new AMIGA logo in the future:



—Benn Dunnington







.....When I first picked up your magazine I was impressed with your wide and critical reviews of over 1000 programs. Don't forget your humble beginnings.

- Ted Barta  
Collegedale, TN

.....Do you ever intend to return to the old format where I got INFO on 100 times as many items, albeit briefly? I far prefer the old format.

- Dave Loomis  
Somersworth, NH

.....The magazine was more useful before you discontinued your current listings. You should review all the Commodore products and continually update your ratings.

- Shannon,  
Van Nuys, CA

\* Thanks for the input. We like the product roundup format, too, so (fanfare, please) HERE IT IS! With over 1200 items listed for the Commodore 64, C128, C128 CP/M, and Amiga, we think you'll agree that this is the best roundup issue ever. We're gaining steam on our plan to be bimonthly and regular, and a key facet of that plan is to produce a biannual roundup issue. (Please note the form on page 34 which lets readers participate in the product roundup rating system.) So twice a year, you'll be updated on EVERYTHING that's available for Commodore machines. (It should take almost that long to read it!)

--Editors

Send us your thoughts, ideas,  
questions, answers, praise,  
criticism (we can take it),  
or your Aunt Martha's recipes.  
WE LISTEN

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Dear INFO:

As a Commodore "hacker" and Secretary of an AFL-CIO Central Labor Council, I hope I can straighten out some misconceptions on your Cottage Industry editorial in Issue #7.

First, you would not be in the category of "cottage industry" workers. As the Editor of Info-64 you would probably be classed as self-employed and/or salaried. Writers have historically worked at home and are not part of any current legislative concern.

Secondly, we aren't interested in finding Jimmy Hoffa. Please do not associate Mr. Hoffa with the AFL-CIO. Mr. Hoffa was Pres. of Teamsters, and the Teamsters were "invited" to leave the AFL-CIO over a decade ago.

Cottage Industry legislation does not refer to salaried people who choose to take work home to their own office. For personal convenience, I run the Central Labor Council office from my home office. I also use this home office for the business of my own union, the Blue Mountain Commodore Users and seasonal farm payroll accounting. But this does not come under the Cottage Industry definition.

Here's what Cottage Industry really is, and why we oppose much of it. When work is deliberately placed out with individuals who agree to work on a "piece work" basis. Let's put me in the role of the employer now, and see why Cottage Industry can be detrimental to employees.

Let's say I run a mailing list service, compiling and selling lists. Continual growth means I have one employee just entering names & addresses into my data files. I pay this person \$1,000 per month, but my costs don't end there. Monthly I also pay \$85 health insurance, \$27 unemployment, \$18 industrial accident insurance and \$71 social security. Vacation and sick leave benefits cost me another \$83, and I think my employee is about to ask for an extra week of vacation time.





I find my true monthly cost up to \$1286 now. And with coffee breaks and a few personal interruptions, my employee only has 7 productive hours a day. With data saving time allowed, I find this employee entering 60 records per hour. with all the fringes my labor cost per record figures to 14 cents each.

So...my solution is "farming" this work out to home workers. I hire 3 people, and offer them 5 cents per entry. It sounds simple, and they accept. When they find they can't make even minimum wage, I'll just replace them with 3 more eager suckers. These 3 people won't even know each other, so they won't be able to compare facts and conspire up a demand for more money. The nice thing is, when I have a day with no new records to enter, they won't earn a cent. I signed them on as private contractors so there'll be no more benefits to pay!

The end result is that I've put one good person in the unemployment line, and put three others on part-time starvation wages. As long as there are willing suckers out there, I'll be able to pocket more than \$7,000 extra profit per year.

It's true you can always find exceptions to this. But labor history can't be ignored when it proves that the major purpose of Cottage Industry has been to pay workers a very sub-standard income.

It is our business, as is anything effecting the well being of employees. Most of the legislation we back each year gives more benefits to non-union workers than it does to our members.

Interest rates are a good example. In the past 5 years, millions of dollars have been spent to keep all consumer interest at affordable levels. This fight benefits both workers and small business.

Lastly, when you call us "extremists" you are labeling as extremists many of your neighbors. We're teachers, phone workers, mail carriers, public employees and various building trade people. Our major goal is fair wages and working conditions for everyone, which includes cottage workers.

- Jim Godfrey, Sec.  
Central Labor Council  
Walla Walla, WA

--It's good to receive such a lucid explanation of the other side of this issue, Jim, but you forgot to mention auto workers. I was a UAW member for twelve years until I got laid off last year and went off to seek my fortune in the computer field. I know the unions do a lot of good things, like standing up for the rights of Social Security recipients, environmental protection, and keeping the politicians honest; these are all things they should get more kudos and accolades for. But we'll stand by our guns on this one. With the advances in communication, transportation, and education this country has made since the sweatshop days of the textile cottage industries, we think those who work at home on computers will be able to get along pretty well without unionization. Time will tell. In the meantime, it's sure to remain a hot issue, and you'll see both sides in the pages of INFO.

-MB

('The Informer' column to which Mr. Godfrey is responding is not written by me or INFO staff, but rather a prominent freelance computer writer whom we wish to keep anonymous to facilitate both his candor and ability to gather information. 'Buddy Hacker' will hopefully continue to appear regularly in INFO, and add his own brand of provocative sensationalism to the eclectic soup which we aim to serve up every other month.)

-BD

My own position on 'cottage computing'? Well, INFO began in & was published for the first year out of a spare bedroom in my house. Since I wouldn't be here today doing what I love if the union had its way, I might be considered a poor candidate for objectivity on this issue. I believe that people who use computers are, for the most part, the least likely to be taken advantage of- especially when they can network together using the very tool that the unions fear will enslave them. Regardless of what protection these people might need, working on computers in the home offers solutions to so many problems that an all-out ban (as proposed by the AFL-CIO) would clearly be the wrong answer. Working at home on a national scale has the potential to save billions of dollars in fuel costs, vehicle maintenance, parking construction, pollution, insurance claims, personal clothing and child-care expenses, as well as dozens of similar personal and national costs. The flexibility and comfort of working with a benign machine in the home at an individual's own pace and convenience seems like many working persons' dream come true. Even a person who is being treated unfairly can at least decide to quit or look elsewhere for a better deal- you have options. With a ban, there is no choice- you just don't work. Readers: let us know if you are doing computer work (for pay) in the home. Tell us how you like it, what problems you encounter, what you are paid for what type of tasks, and any tips or advice you would like to offer others (also let us know if you feel you are being abused or taken advantage of.) If there are enough of you out there who respond, we will publish the collective information in a future issue and you and others will be able to see how you compare to the norm, and you can confront your employer or look for a new one if you find that you are getting a raw deal. People communicating and helping each other (especially with low-cost computers) is the best way to fight oppression & ignorance.

-BD





# Virtuoso! (Version 1.1)

## A True Musical Master for the Commodore 64

### All About Virtuoso!

**Virtuoso!** is a complete music package for the Commodore 64 that allows you to create sounds, compose, and play compositions with ease. Virtuoso! is easy to use for the beginner, but is also a very useful composing tool for the amateur or professional musician. Virtuoso! is completely menu-driven making it a snap to use! Here are some of Virtuoso!'s exciting features: (All in memory at one time).

### Presets

The Preset module allows you to create instruments such as strings, horns, woodwinds, and even a few you've never heard of before! Features:

- Allows you to change all the parameters of the C-64's SID chip graphically.
- Allows variable modulation of up to 18 parameters of the SID chip.
- Realistic synthesizer panel graphics.
- Up to 24 presets in memory.

### Composer

The Composer module allows you to write musical compositions either by using your creative talents or by using sheet music. The Composer works with the Preset module allowing you to create a true symphony! The Composer module is very powerful and allows you to do things no other music package allows you to do. Features:

- Write compositions up to 900 notes per voice (3 voices).
- Complete transposing features.
- Coda, repeats and other useful functions.
- Easily switch presets, change volume of a voice (or overall) or change key signature throughout a composition.
- Complete 8 octave scale.
- Use dotted whole notes down to 1/192 notes.
- Notes can be played staccato, legato, or normal.
- Plays triplets exactly.

- Print your composition on any standard printer.

### Player

The Player plays compositions written by the Composer using presets created by the Preset module. Features:

- Adjustable tempo to playback compositions from very fast, to very slow.
- Ability to play in foreground or background mode.
- A MULTI-COMPUTER feature that allows two or more C-64's to be connected and play multi-part compositions in synchronization.

### Extras

But, that's not all! **Virtuoso!** lets you add on:

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- **Virtuoso! Musical Keyboard:** a professional style four octave keyboard with software: (Available June 1985) \$69.95.

### ORDER TODAY

Virtuoso! comes complete with 10 compositions ranging from classical to new rock. It also comes with 20 presets allowing you to get started right away! Virtuoso! comes to you on disk for the C-64 and requires no additional supplies. An excellent value!

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Designed to run on a large mainframe, ELIZA has never before been available to personal computer users except in greatly stripped down versions lacking the sophistication which made the original program so fascinating.

Now, our new Commodore 64 version possessing the **FULL** power and range of expression of the original is being offered at the introductory price of only \$25. And if you want to find out how she does it (or teach her to do more) we will include the complete **SOURCE PROGRAM** for only \$20 additional.

Order your copy of ELIZA today and you'll never again wonder how to respond when you hear someone say, "Okay, let's see what this computer of yours can actually do!"

### READ WHAT THE EXPERTS SAY ABOUT OUR VERSION OF ELIZA:

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—PC MAGAZINE

"Delightful entertainment... An ideal medium for showing off your system."  
—MICROCOMPUTING MAGAZINE

"ELIZA is an astounding piece of software... A fascinating program to use and study."  
—BARON'S MICROCOMPUTER REPORTS

"ELIZA is a great way to introduce your friends to computers... A very funny party game."  
—PETER A. McWILLIAMS

"ELIZA is an exceptional program, one that's fun to use, shows off your machine, and has great historical interest."  
—POPULAR COMPUTING MAGAZINE

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—HOME APPLICATIONS FOR THE C-64

**ELIZA IS AVAILABLE IN THE FOLLOWING FORMATS:**  
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1. Protected Version ..... \$25  
(Protected Version can be run but not listed or modified)
2. Un-protected Commodore 64 BASIC Source Version ..... \$45  
(Source Version can be listed and modified as well as run)

Both versions include a six page user manual.

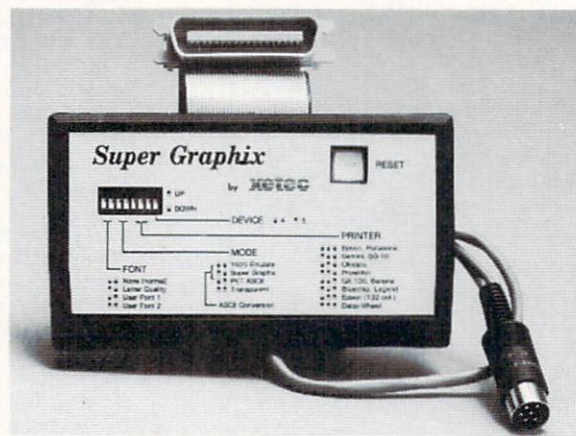
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## COMMODORE 64 BENCHMARK

(Sieve of Eratosthenes)

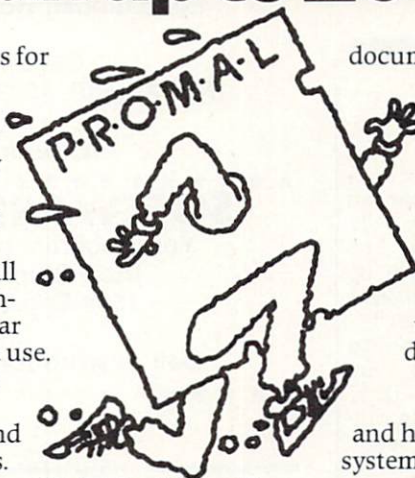
	PROMAL	BASIC	COMAL	FORTH	PASCAL
Execution Time (secs.)	30	630	490	51	55
Object Code Size (bytes)	128	255	329	181	415
Program Load Time (secs.)	3.2	3.8	6.3	11.2	23.5
Compile Time (secs.)	8.5	—	—	3.9	108

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# \$49.95 to be exact.

PM-200 except the ability to print or save

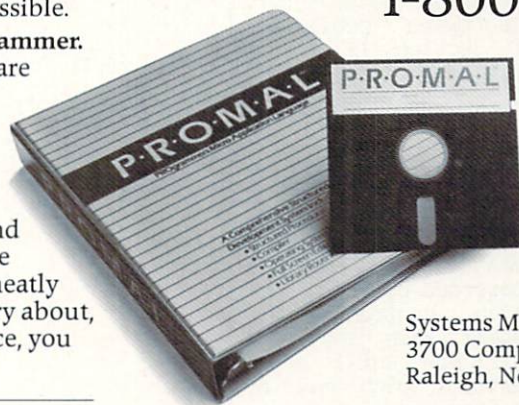
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PROMAL Package Desired (check one):

- ☐ PM-200 (for systems listed above) \$49.95 plus \$5.00 for shipping and handling at a total cost of \$54.95. Satisfaction Guaranteed.
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★ ★

I am writing to comment on a statement by Mark Brown which appeared on page 31 of issue number 7. Specifically, Mark said "the U.S. of A.'s copyright laws allow you to make up to five (why so many? I don't know.) copies of a program for your own use."

The right of software consumers to make backup copies is governed by Section 117 of Title 17 of the U.S. Code. Subsection 2 discusses copies for "archival purposes only" and it seems that the reference to "archival copies" at least suggests that more than one backup may be made. However, it does not appear that a specific limit on the number of archival copies is mentioned.

More importantly, your readers should be made aware that many sections of the copyright statute are default options. These defaults govern relationships between a copyright owner and consumers only in the event that no specific contract clause between the owner and the consumer governs the situation contemplated by the statutory section. Many software publishers evidently think of Section 117 as a default option rather than a mandatory right, because many software license agreements specifically prohibit the user from making backup copies. Some, for instance, offer the option of sending in a ruined master disk with a fee in order to obtain a substitute master.

License agreements are contracts and contracts are governed by state law. Whether or not such contracts are binding on the consumer when they are hidden from view in a box until after purchase is a question which may be decided differently from one state to the next. However, I suspect that many publishers would fight to support the validity and enforceability of their license agreements which prohibit user-made backup copies.

- Sincerely yours,  
John Krout  
Law offices of Gipple & Hale  
McLean, VA

A much appreciated legal clarification, John. It seems that the grapevine, always a questionable source of legal advice, was wrong on this one, too. It looks like the piracy-or-protection controversy will continue to rage on, at least until some definitive laws or court decisions come down.

--Editors



CEREAL I/O PORT



PRIMITIVE WORD PROCESSOR :  
SYSTEM CRASH



# NEWS & VIEWS

REPORTED BY:  
**Bern Dunnington**



## C-128 UPDATE

Well, after many last-minute hold-ups (apparently related to FCC red tape), the Commodore C-128 finally began shipping in late August. Every dealer we have talked to has sold every C-128 they've been able to get their hands on, and are waiting for more to arrive. One of our friends in Denver, CO reports that the Denver Sears store sold their entire initial shipment (500 units) in 4 hours!

1571 disk drives are still in short supply, but we finally received a production unit to replace our prototype, and are pleased to report that the replacement is free of the minor bugs which were present in the prototype.

We still have not received a single software title to look at that specifically takes advantage of the machine's higher performance 128 mode (8502 CPU), although **Batteries Included** promises that we will have review copies of new 128-specific versions of **PaperClip** and **The Consultant** by the time you read this. Also said to be near completion are: **SuperBase 128** & **SuperScript** (both by **Precision Software**, available from **Progressive Peripherals**-see related item below), **Vizastar 128** from **Solid State Software**, **Perfect Writer**, **Speller**, & **Filer** by **Thorn EMI** from **Commodore**, and several titles from **TimeWorks**. Fortunately, the titles above suggest that at least quality, if not quantity, will attend the slow start in C-128 product introductions, with the list above representing C-128 versions of some of the very best productivity titles for the C-64.

## CARDCO WARNING: BOGUS INTERFACES

The folks at Cardco Inc. (Wichita, KS) asked us to pass this alert on to you: Apparently, Cardco contracted with a Japanese firm to produce Cardco "Plus G" printer interface. The units arrived here defective, and Cardco cancelled the contract. Somehow the reject units made their way into the country via the "black market", and have been showing up here and there. There are two ways to identify the bogus units: they don't have an FCC approval label on the back, and they are about 4 oz. lighter than a genuine "Plus-G". If you find one in a store, tell the dealer- he probably bought them unknowingly, and will be glad to be warned by you.

## MIMIC SYSTEMS STILL PROMISING APPLE EMULATOR

We first broke the 'story' on this product two years ago (see issue #2- Winter 83/84). Back then it was **PIONEER SOFTWARE**, and we used to be able to reach the president, **Dave Perras**, for periodic reassurances that the **AP MODULAR PAK** (as the **SPARTAN** was then called) was near completion and that a prototype for review was anywhere from a couple of weeks to a couple of months away from shipping.



**SPARTAN MIMIC**  
Who is this man, and  
why is he smiling???

Now the company is called **MIMIC SYSTEMS**, the product is called the **SPARTAN**, Mr. Perras won't return our calls, and we still have yet to see a working prototype, much less a production unit. The **Mimic Systems** order line always gets us thru to a cheerful order taker who assures us that units will be shipping in "6 to 8 weeks", and "would you like to place an order?" We have been getting this same "6 to 8 weeks" line for the last 9 months.

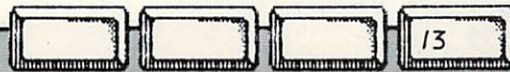
What about the **SPARTAN** itself? For \$599.00 this add-on is said to allow the C64 to use all Apple II+ software and hardware. Let's say you've got a C64 and you also want to use Apple II+ software and peripherals, is \$599 a good deal? To find out, I called a local Apple dealer in Iowa City. I was informed that the Apple II+ (which is no longer made) is often traded in on newer systems: how much do the used II+'s go for? The local dealer typically sells the used II+ with a disk drive and monitor for.... \$450.00! So, I could have an entire **GENUINE Apple II+ system** for \$149.00 less than it would cost just to make my C64 compatible, and I wouldn't have to tie up my C64 to do it. If you just HAVE to use Apple II+ stuff, at least give your local Apple dealer a call and see what the alternatives are.

I've got other problems with the **SPARTAN**: look at the photo in the ad (on page 1)- by the look of it, the **SPARTAN** has to plug into the entire array of ports on the back of the 64! (I sometimes have trouble just getting a single cartridge or cable to line up properly)- you're likely to need a **VICE** to connect this whole gadget to the 64!

Folks, I hate to lose another advertiser, but I smell **TURKEY** (and it's not even Thanksgiving yet)!



**INFO**





## PROGRESSIVE GETS PRECISION TITLES

PROGRESSIVE PERIPHERALS NOW EXCLUSIVE U.S. DISTRIBUTOR FOR PRECISION SOFTWARE PRODUCTS

Precision Software (makers of SuperBase, EasyScript, and SuperScript) have closed their U.S. offices, and retreated across the Atlantic to England from whence they came. In their stead, Progressive Peripherals (Denver, CO) will be the exclusive distributors for Precision's product line in the U.S. Progressive's Max Donaldson says that Progressive Peripherals will also take over technical support for the line, and that new C-128 Versions of SuperBase and SuperScript are expected to be arriving in the U.S. around mid-October.

## 3 FROM AQUARIUS

AQUARIAN SOFTWARE ACQUIRES DISTRIBUTION RIGHTS TO COMPUTER TOOLS TITLES

Aquarian Software (see ad elsewhere this issue) has just acquired the distribution rights to several software titles from Computer Tools (NY). Among the first titles to be marketed will be CAD GEM, a low-cost, 3-d wire-frame CAD package for the C64 which supports light-pen, keyboard, or joystick input, and can scale, rotate, translate, and zoom complex objects in space. We have worked with a preliminary copy, and were quite impressed. Another title ready for release is ?THE THINKER?, a "thought processor" which promises performance comparable to software costing nearly \$500 on the IBM PC-XT. ?The Thinker? lets you type in thoughts as you have them and evaluates them on up to ten criteria. Based on 'Bayesian' logic, ?THE THINKER? comes with the Computer Assisted Thought Organization & Evaluation System (CATHOES) package for \$39.95. For graphics enthusiasts, Graphic Screen Exporter-64 will be of interest. This \$29.95 utility is said to convert graphic screens created by any graphics program into any other graphics format (including hi-res to multi-color and back.)

for more INFO, contact: Aquarian Software  
PO Box 22184  
Portland, OR 97222  
(503) 654-2641

## NEW DIGITIZER



A new video digitizer made by PRINT TECHNIK of Austria has made its way into this country and will be distributed by Bowitz International of Las Vegas NV. The video digitizer features high-res. full-screen imaging, menu-driven controls, light pen editing capability, translation to Koala and Paint-Magic formats, popular printer support files, artificial coloring, cursor-controlled image cropping, and comes with a diskette containing several applications routines including: slide show (sequential display of stored pictures), and a program which compares two consecutive pictures for deviations, counts these, and triggers an alarm if a specified number of deviations is exceeded. The digitizer interface has controls for adjusting contrast, brightness, & aspect ratio. Standard video sources such as video cameras, vcrrs, and composite video out may be used as input.

for more INFO, contact: Bowitz International  
3140 Polaris Ave.  
Las Vegas, NV 89102  
(702) 731-1516





# SOUND BITE

by: Peggy Herrington



Signs of a depressed industry abound these days and are faithfully reported by the media, and while tales of 3rd-party mergers, 1st-party stock-piles and 2nd-party buying reluctance help bring prices down, they sometimes make for fairly dull reading.

There's a real battle brewing in one segment of the industry however which shows promise of livening things up. Four commercial networks are squaring off for their first World War this fall with two others about to join the battle for your telecommunications dollar. And the fight could become so intensified you might not be able to remember whose side you're on without a program.

## REMEMBER WHEN TALK WAS CHEAP?

Well, it's not anymore... at least not on a commercial network. Provided you know what you're doing, you can swoop online, download a couple of programs and read or upload a few messages fairly often without incurring major expense. But when it comes to conversing with other users online in real-time -- whether you're gaming on **PlayNet**, questioning a guest on a **CompuServe** Conference, indulging in a little CB **CompuSex**, matching wits with some of the liveliest **SYStem OPerators** in the biz on **Delphi**, or joining the Partyline on **PeopleLink** -- you can run up a staggering bill in a month's time. By then they've gotcha: You're hooked!

Say you go online for couple of hours a session, three times a week -- not overly much, believe me. If you're on one of the full-service networks, at this rate in one month you'll spend the price of a C64 from a discount house today. Some network analysts believe that's too much for the low-end Commodore market, no matter how extensive the online data bases or informative the talk. While others offer convincing arguments to the contrary, this reasoning has spawned several lower priced networks, ala **PlayNet** and **PeopleLink**; networks that offer less extensive services on simpler systems; networks which "power-users" -- people who've mastered **CompuServe** or **Delphi**, for instance -- try to ambush at every opportunity.

[ -Editor's note: even at our increased rates, you can still subscribe to **INFO** for a YEAR for less than most telecomputists spend in one evening for connect time.]

## ALL'S FAIR...

As far as Commodore personal or hobby networking goes with no weekday business services included, there are four commercial networks doing battle now. Two more will sally forth this fall and a third (**Gateway** with **NAPLPS** graphics) is rumored to be oiling its guns (beta testing). Blow-by-blow accounts of the action will be in future issues but here's a brief description of how the field is shaping up. The figure in parentheses is the cost of 24 hours online not including signup fees (if any), during evening and weekend hours only at 300 baud -- our month in the preceeding example. Keep

in mind that wars are not necessarily won by financial advantage; knowing how and what to put on(the)line can turn any battle.

**CompuServe** 1-800-848-8199 (In Ohio 1-614-457-8650)  
No registration or monthly service charge, just \$6 per hour online. Although the Commodore Information Network (CIN) is moving to **QuantumLink**, spokesman Jeff Ballowe says CompuServe is committed to CBM users, who form a substantial portion of their 220,000 subscribers, many of whom have never been near CIN, and will continue to offer Commodore-oriented services with or without CBM. There's a wealth of info and fun on this proven, reliable network. (\$144.00)

**Delphi** 1-800-544-4005 (In Maine 1-617-491-3393)  
\$49.95 registration includes a handbook and 2 hours online, then \$6 per hour. No charge for 1200 baud or Tymnet access. Extensive data bases building nicely here. Check out Flagship Commodore, Micro Artists Network (aka "MANIAC") and Bozart's. (\$144.00)

**PeopleLink** 1-800-524-0100 (Illinois 1-312-870-5200)  
Registration is \$29.95, no monthly service charge. First 3 hours each month at \$4.78 each, then \$2.95/hr thereafter. Talk-oriented "PLink" is rumored to have successfully wooed many of the saner CBer's away from CompuServe. (\$76.29)

**PlayNet** 1-800-PLAYNET. The registration of \$19.95 includes 3 disks and a manual; \$8/month service charge and \$2.75/hr online, plus about \$.50 each for downloads. Disks hold terminal program, colorful graphics and games that require a minute or two load time from your disk drive each time you switch areas. Menu driven and super-easy to navigate. Online shopping and public domain program libraries recently opened. (\$74.00 plus download fees if any)

## NEW CONTENDERS

**QuantumLink** A national network that has tried before and failed, **QuantumLink** might make it this time with the aid of Commodore Business Machines online, including the **SYSOPs** from CIN. They've liscensed the rights to use any/all of **PlayNet's** software, both user and mainframe and are now busy altering it and arranging beta testing. Dave Paul, CBM Telecom Manager says it won't require a special modem. Prices announced at MARCA were \$9.95 for basic service plus \$3.60/hr in surcharged areas like talk and probably downloading. Full service network is planned. (\$74.75 at 75% surcharged)

**ViewTron** 1-800-327-6500 This fall will be the first-ever U.S. offering of network **NAPLPS** for the C64, the Canadian protocols that allow transmission of color graphics with text, and you'll probably need 1200 baud (at no extra charge) to appreciate it. Starter Kit for \$9.95 will include terminal software, manual and one hour free online. Thereafter it's \$5.40/hr for full range of services: online shopping, conversation, reference materials, CBM software reviews and special interest groups. (\$129.60)

INFO



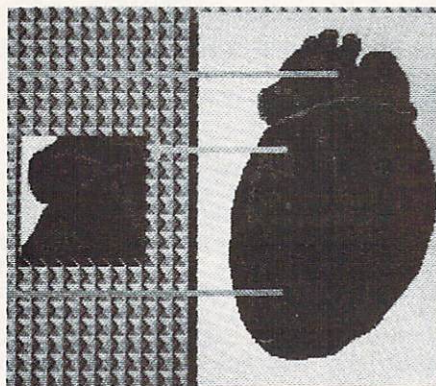
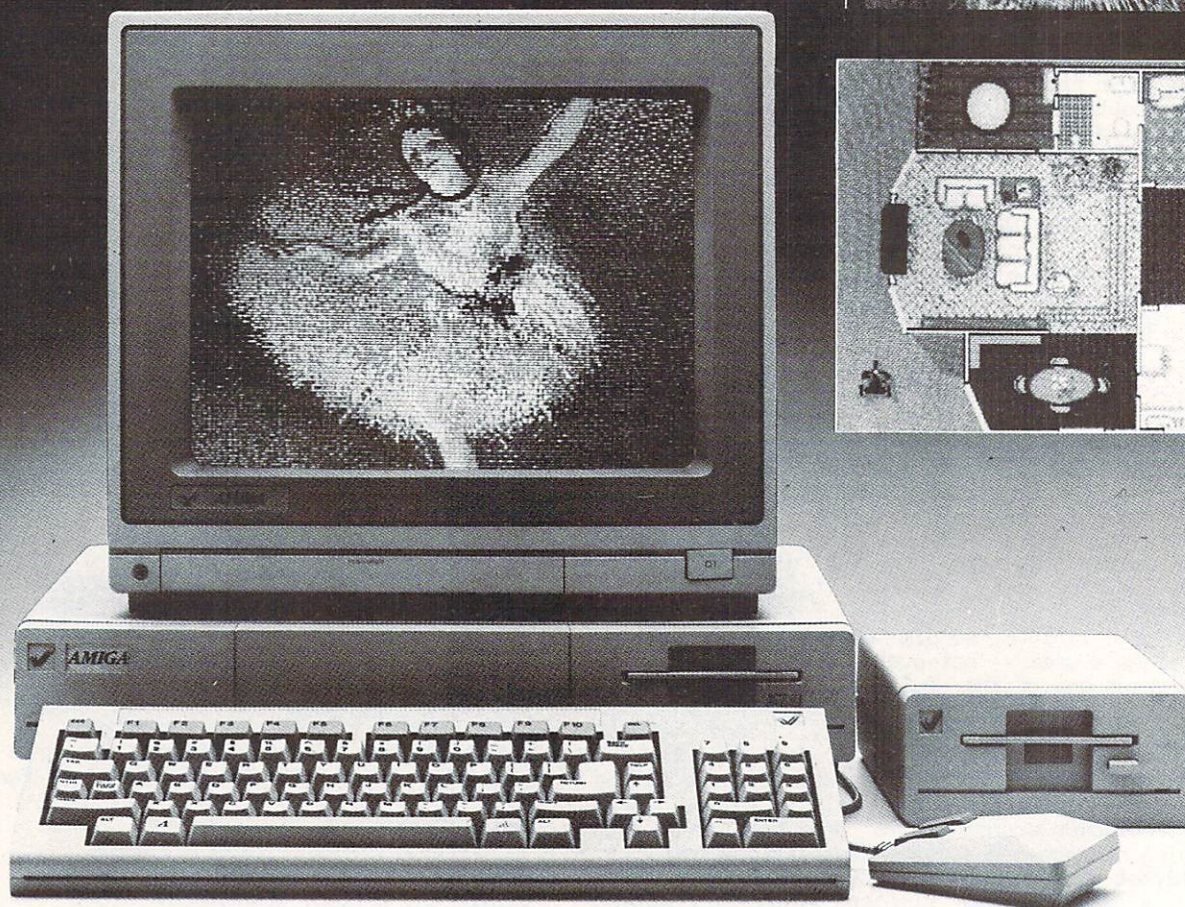
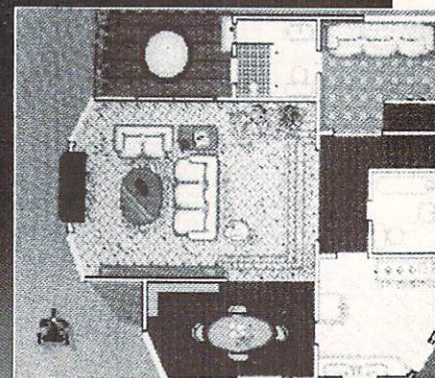
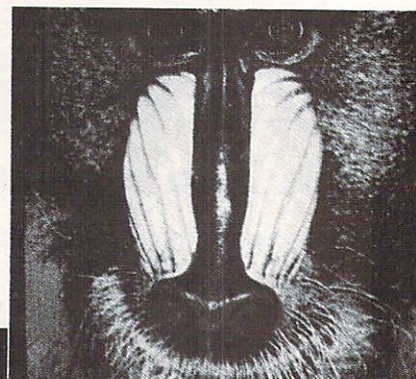
# INFO





# AMIGA!

## \* IN PICTURES \*



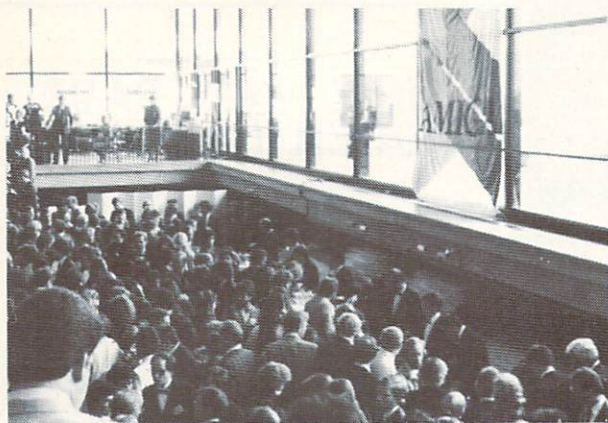
July 23, 1985. In the specialty computer stores around the country, business appears as usual; posters of Charlie Chaplin look-a-likes and partly-eaten fruit hang jauntily from walls, crates of PC's are stacked neatly on the plush carpeting, and cash registers ring merrily (or do their electronic equivalent) as a steady stream of no-nonsense consumers trades sobering sums of cash for armloads of impressive-looking equipment and provocatively packaged software. Reassured by solid-feeling ads, and comforted by names which ring with the sound of permanence (IBM...Apple...AT&T...) customers and salespersons smile knowingly at each other; it feels good to be sure, to be in the know, to have an eye for quality, to be **BUYING RIGHT**.

A similar sense of well-being and business-has-never-been-better must have pervaded the average carriage shop on the day Henry Ford unveiled his Model 'T'.

July 23, 1985. If you are interested in history, you will want to remember that date; it is the day that IBM's PC, Apple's Mac, and scores of lesser silicon marvels of our decade became obsolete.



July 23, 1985  
Lincoln Center  
New York, NY



Lincoln Center crowd scene

They came by the hundreds, many in black tie. They lined up for over an hour in the hot July evening and waited until the receptionists saw the futility of greeting each individual, threw up their hands, closed their guest registers, and opened the flood gates. The hour of the Amiga debut was at hand.

Inside, the huge assemblage of Members of The Press rubbed shoulders and jockeyed for position; some pressing toward the dozen or so bar tenders mixing drinks at blurring speed, others seeming to dance with waiters carrying exotic permutations of fish, fowl, meat and garnish held aloft on silver platters, while others tried to see thru shrouds which covered dozens of computer-sized objects resting on table tops throughout the building.

A contagious electric thrill was sucking at our socks, like an undertow. I had heard the phrase nearly 50 times in the last 2 weeks, but now I could almost imagine the literal reality of, "it'll blow your socks off!"

Finally we filed into the inner arena and were held in restless abeyance by an unusual musical apparition: three persons playing a haunting piece rendered unto our ears by a violin, xylophone, and tuba!

Three Amiga monitors glowed softly around a low stage, and T.V. crew members limbered up with both hand-held and rail-mounted video rigs. The music stopped, the lights went down, and history was made.

The show lasted about 2 hours, and many wondrous sights and sounds held the audience captive:

We witnessed astonishing demonstrations of animation; fluid, fast, complex, & captivating. There was thunderous applause.

We heard incredible sounds; from the deep thud of tom-toms to the totally convincing raunchy guitar opening of "Smoke on the Water". There was wild cheering.

We saw Andy Warhol immortalize Debby Harry on the big-screen in Op-Art splendor. The applause was getting monotonous.

We saw a Degas painting of a ballerina come to life and dance gracefully in perfect sync with a real ballerina on the stage below. I saw grown men dabbing at their eyes.

We saw MS-DOS loaded into an Amiga by a 40K software emulator followed by Lotus 1-2-3; as the drab green text slowly filled the screen, a hush settled over the crowd. The contrast was shocking. There was understanding, and then there was pandemonium.



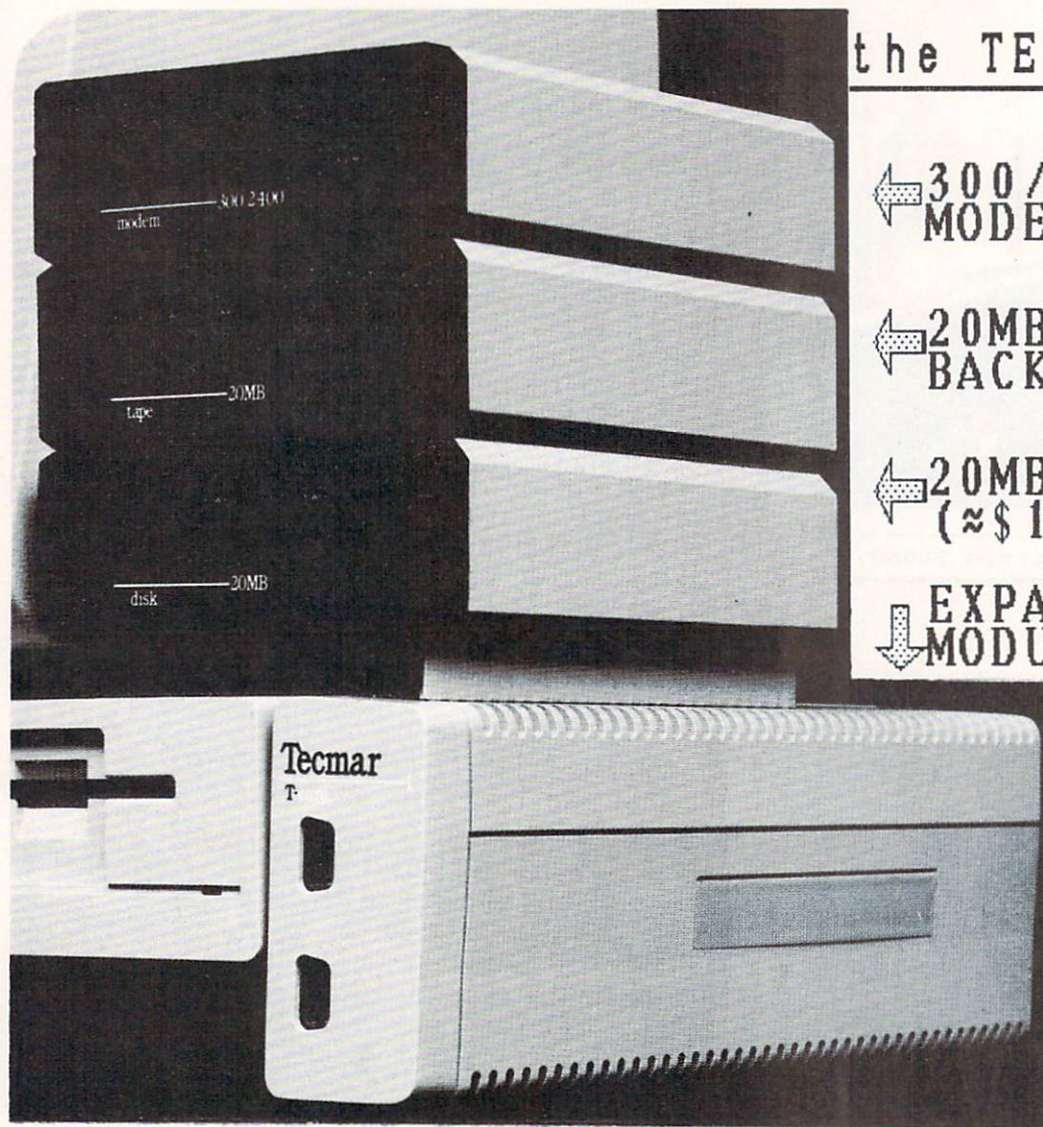
AMIGA monitors glowed softly



Debby & Andy: a nice couple

-B.D.





## the TECMAR family

← 300/2400 BAUD  
MODEM (≈\$600)

← 20MB TAPE  
BACKUP (≈\$600)

← 20MB HARD DISK  
(≈\$1000)

↓ EXPANSION  
MODULE (≈\$400)

### MODEMS

Commodore's 1200 RS modem (photo opposite) operates at 300 or 1200 baud, is auto answer / auto dial / auto baud / auto speed / auto mode selection / and features Hayes "AT" command set / built-in speaker / terminal software (on disk) / and one month subscription to Commodore's "Quantumlink" information service. Seems like a fair deal at \$295. Tecmar is also offering a modem: for about \$600 you get 300-1200-2400 baud operation / tone decoding / off-hook detection / and interfacing to AMIGA's audio circuits.

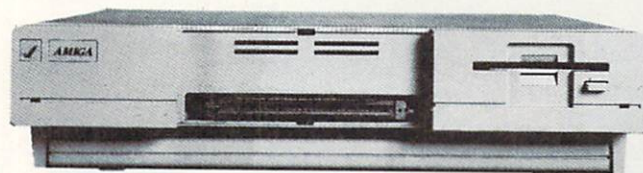
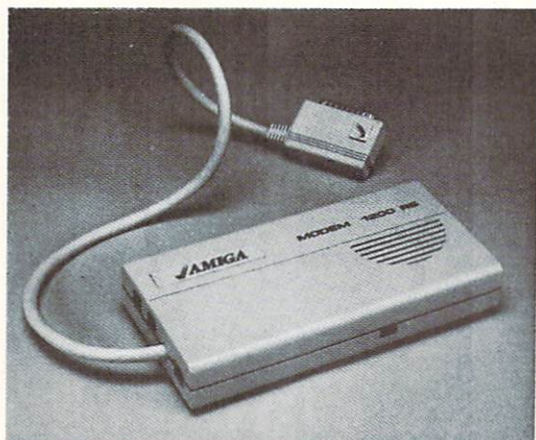
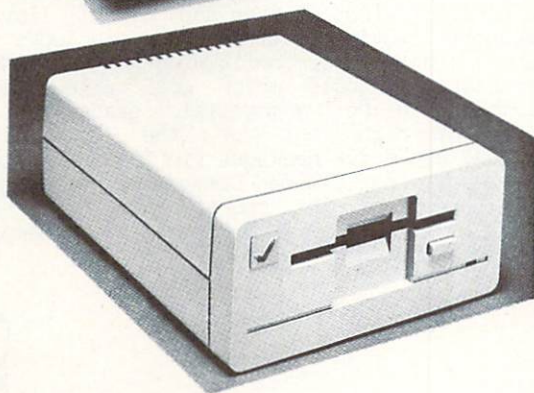
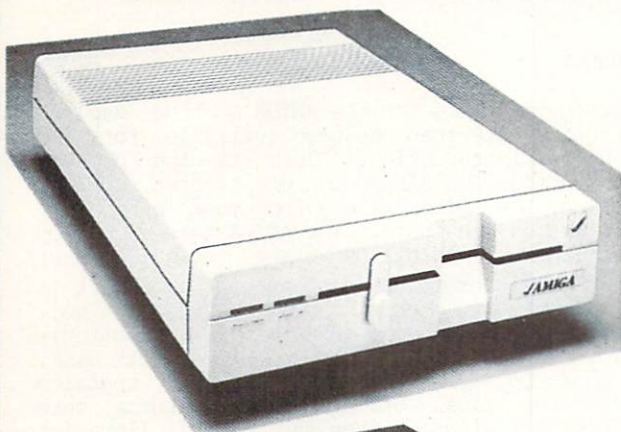
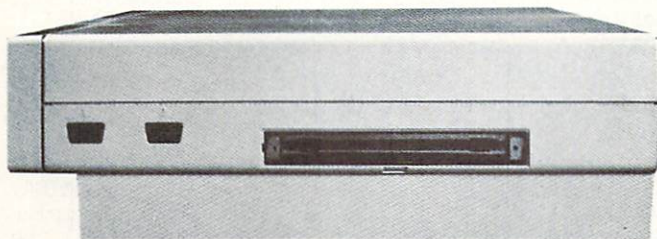
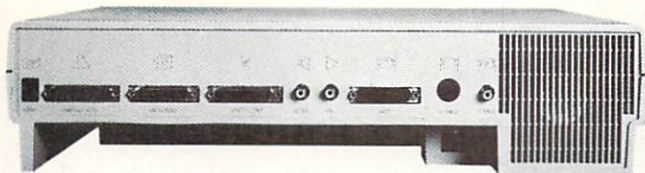
### OTHER HARDWARE

AMIGaphiles will want to get the max out of their machine with the AMIGA A1080 analog RGB color monitor (tho you can get decent results from a composite monitor or even a home T.V.). The A1080 (made for Commodore by Toshiba) will set you back about \$500 for a 13" screen capable of showing all 4096 colors at a resolution of 640 x 400 pixels and at a 10 MH bandwidth. This monitor will accept other video input including digital RGBI, NTSC composite, VCR, and TV tuner.

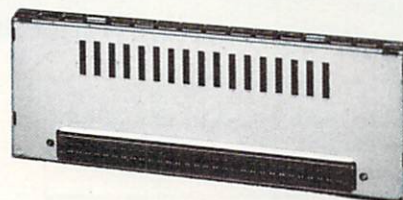
For even more elaborate video possibilities, you may want to look into the low-cost (about \$200) gen-lock interface which allows for sophisticated input, manipulation, synchronization, and processing of various video signals (see center photo, next page, the gen-lock device is on top of the monitor). For example, at the Lincoln Center show, an animated image of a 3-D slab with the AMIGA logo written in space in front of it was being tumbled end over end in front of a live video image supplied by a camera trained on the crowd. This type of capability has not been affordable in the past, and will probably sell like hotcakes to the smaller cable tv stations as well as schools.

The Amiga Eye, a nifty video digitizer or "frame grabber" from A-Squared Systems adds even more possibilities to the already rich video & graphics horizons claimed by AMIGA (see color photo on page 6). The Amiga Eye allows capturing an image, and then manipulating the hue, saturation, luminance, and brightness of the image as well as replaying one-second segments in slow-mo, stop action, or high-speed.





256K - \$200  
just plug it in!



Initial hardware offerings upon the introduction of the **AMIGA** are impressive.

As you can see from the photos here, the **AMIGA** is bristling with ports. Even tho it has no internal card cage, the **AMIGA** is the most expandable & flexible PC ever unleashed.

#### MEMORY EXPANSION

The top right photo shows the internal memory expansion slot in the center of the main cabinet (this slot is normally covered by an exterior panel.) Below it is shown the 256K expansion module (expected price: \$200).

Immediately to the left of the expansion module is the right-hand view of the system unit showing the expansion bus. It is thru this bus that further (external) memory expansion will be accessed (up to 8 Megabytes). On the opposite page you can see the first product which uses this port: the Tecmar 'T-Card'. The 'T-Card' snaps onto the side of the **AMIGA** and provides space for the first Megabyte of extra RAM as well as a clock/calendar with standby battery, serial port, parallel port, buffered bus expansion port, and heavy-duty power supply.

#### DISK STORAGE

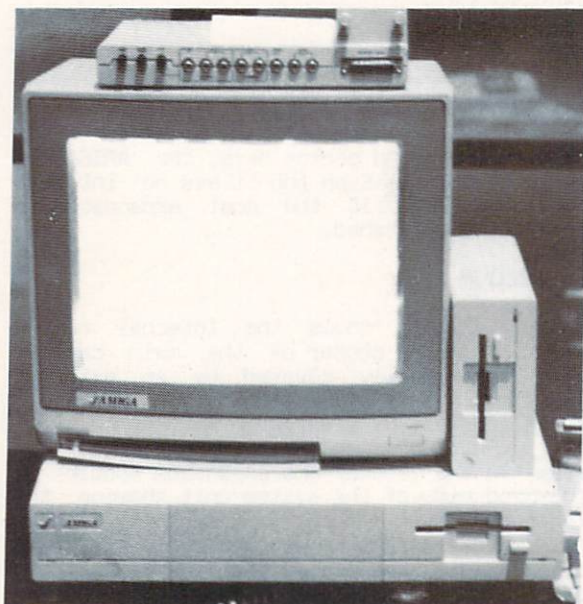
Beyond the built-in 880K 3.5" micro-floppy drive, Commodore is offering add-on 3.5" drives, and a 5.25" 360K floppy drive. The 5.25" unit looks exactly like the C-128's 1571 (and is probably the same mechanism) and is for use with IBM formatted diskettes by those using the IBM emulator or wishing to transfer data files from IBM software to **AMIGA** software. Maybe the most exciting storage news is Tecmar's 20 MB 'T-Disk' hard drive (see photo opposite) which is slim, fast, and inexpensive (about \$1000). Tecmar is also offering a 20MB tape backup system for their hard drive for about \$600 (!) which will back up 20MB in "a few minutes". Tecmar's \$3500 60MB tape backup for the IBM PC was recently top-rated in a comparison done by Popular Computing (Sept. 85). Who says the 'big boys' aren't supporting the **AMIGA**?







↗ AMIGA with laser printer  
 ↘ Gen-lock video device



Lots of documentation

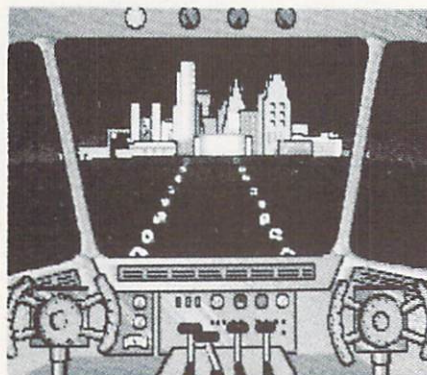
Arktronics showed their **Textcraft** wordprocessing package driving a Hewlett Packard **laser printer** (see top photo), and they are working hard on a publishing package which we hope to be beta-testing for them later this year. We expect to see the cost of laser printers coming down soon, and when they do- you'll see a revolution in publishing that would make Gutenberg's head spin!

#### DOCUMENTATION

As you can see from the bottom photo, there is already a stack of support documentation ready for the **AMIGA**. Separate manuals and guides were on display covering almost every aspect of the **AMIGA**. With a machine as diverse and potentially complex as the **AMIGA**, good thorough documentation will be critical.

#### SOFTWARE

More software exists for the **AMIGA** on the eve of its shipping date than has been available for any other PC at introduction. Turn to the product roundup section for a rundown of current titles, and look at the **AMIGA** gallery for some previously unpublished screen shots. The **AMIGA** comes bundled with **AMIGADOS**, **INTUITION** (the graphic user interface), **Microsoft Basic** (Microsoft claims it is the best version they have ever written), **Kaleidoscope** (a graphics package from Electronic Arts), and a tutorial disk. The "Kick-start" disk, which boots up the operating system, also contains over 120,000 lines of proprietary source code containing all kinds of free and useful libraries and support routines. This code includes (for instance) routines for configuring RAM as **RAMDISK**, and development tools which will allow serious programmers to do commercial grade software development right out of the box without additional expensive packages (in fact, we recently read a report that claimed Commodore is targeting certain areas of the country for heavy **AMIGA** shipments where high numbers of unemployed programmers are known to live.)





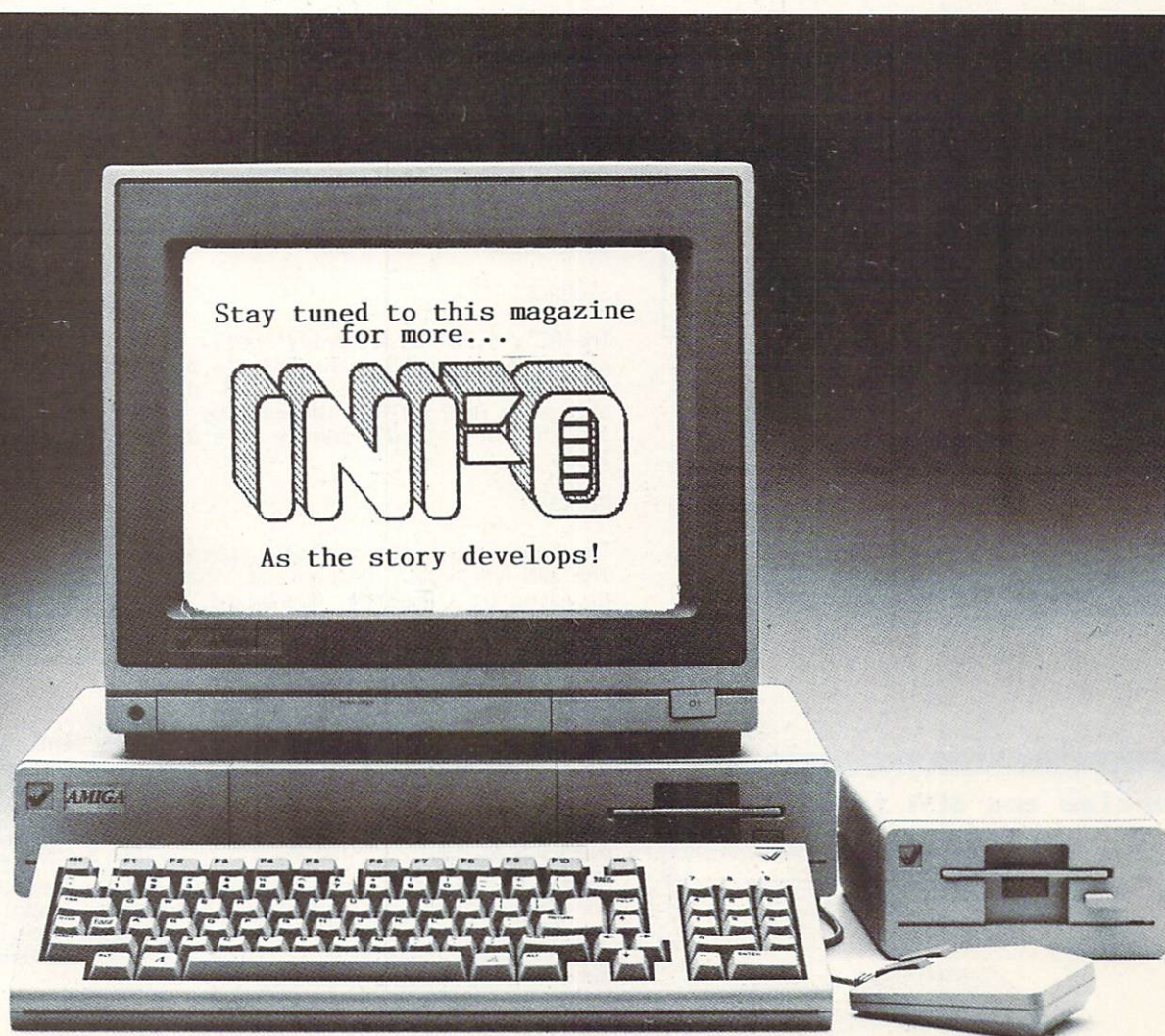
The third party software we saw in New York was impressive. The common thread was speed and superb graphics. Games like Electronic Arts' **Marble Madness** and Sublogic's sequel to Flight Simulator, **Radar Raiders** are real eye-openers (see color screens of both in **AMIGA GALLERY** on page 6). Ironically, 'Marble Madness' is an Atari arcade game which, because of speed and animation considerations, will look and play much better on the **AMIGA** than on Atari's own **ST**!

While **AMIGA** critics whined, "but there's no big-name business software for it", we would like to point out that the **ENABLE** line of productivity software is near completion, with their full-blown integrated package, **The Office Manager**, slated for December, '85 release. If you follow the reviewers in non-Commodore magazines, you will recognize

**ENABLE** (with its combined wordprocessor, spreadsheet, database manager, telecommunications, and graphics modules) as a title that is generally regarded as far superior (in its **IBM** incarnation) to 1-2-3 and the other more heavily hyped titles in vogue today. In its **AMIGA** version, **The Office Manager** can even transfer files to and from 1-2-3, dBase II, VisiCalc, Volkswriter, Easy Writer, and Multimate, and will most likely make moot the question of "when will these titles be available for the **AMIGA**?" (and you can bet your blitter that it will cost at least one arm or leg less!)

In our November/December issue, we will return with a hands-on report on the **AMIGA**, and several of the 3rd-party products that go with her.

-B.D.





# Amiga vs IBM

**The question is:**

**How can you make an IBM PC  
more like an Amiga?**

The major question that most computer journalists seem to ask about the Amiga is, "How good is its IBM emulator?" This is like asking, "how good a bicycle does your motorcycle make?" The answer is not going to be very satisfactory, because the question is ludicrous. An equally ludicrous, but more appropriate question might be: "How good a motorcycle can you build out of a bicycle?" Or, in this case: How can you make an IBM PC more like an Amiga?

## THE SYSTEM LEVEL

First of all, the IBM PC has some real internal problems to overcome. The Amiga's microprocessor has twice the throughput of the IBM's cpu, and runs at twice the clock speed. This gives it a four times speed advantage. Add the margin it gains by means of its three time-saving co-processors, and the Amiga leaves the PC in the dust. For \$300 you can add an 8088-2 'OverThruster' chip to the PC which the manufacturer claims will give you a 60% speed improvement. We can also get a little boost on calculations by equipping it with an 8087 math coprocessor (\$149), but this still won't bring it even close to Amiga speed. Besides, most software will not take advantage of the 8087. Unfortunately, it's the best that we can do. The 68000 in the Amiga can also address 8 megabytes of add-on memory, while the PC can only handle 640K, but there's nothing we can do about that, either. If we want to add more RAM later, we'll have to use less effective bank-switching to do it.

**The Amiga leaves the PC  
in the dust....**

## STORAGE

The PC's 5.25" disk drive only stores 360K of data, compared to the 880K the Amiga's 3.5" drive can handle. We'd better buy our PC a second drive, which at least brings us up to 720K. We can buy a PC with two drives and 256K of internal memory as a package deal for \$2995 list.

## PORTS

The Amiga has built-in RS232, parallel, and game ports. The IBM has none. We can add them all to the PC by plugging in a Quadram Quadboard for \$795. This also expands the internal RAM of the PC to its full 640K; we'll need it, as you'll soon see.

## OPERATING SYSTEM

We want an operating system like Amiga's Intuition, so we'll add TopView (\$149) and GEM (\$49) and a mouse (\$149) to run them with. They take up about 256K of RAM, so you see why we added the full RAM to our Quadboard. TopView is our multitasking environment, but it's much slower than Intuition since it's just glued on top of the PC's normal MS-DOS. It doesn't leave us enough free memory to run more than two really heavy-duty applications together. In fact, it's doubtful whether we can even get two programs as massive as Lotus 1-2-3 and Wordstar 2000 both up and running at once.

**Topview and GEM take up  
about 256K of RAM...**



The PC comes with no  
video output at all...

Perhaps it would have  
been kinder to compare the  
Amiga to the IBM PC/AT.

## Amiga vs IBM

The price of comparably  
equipped systems

Amiga w/3.5" 880K drive	\$1295
PC Emulator (software)	\$ 100
PC Emulator (hardware)	\$ 100
RGB Analog Monitor	\$ 495

**Total System Price \$1990**

IBM PC w/2 5.25" 360K drives & 256K RAM	\$2995
Roland Synthesizer board	\$ 425
Enhanced Graphics Card	\$ 982
Mouse	\$ 124
GEM (software)	\$ 49
TopView (software)	\$ 149
8087 Math Coprocessor	\$ 149
Nucleus Overthruster	\$ 295
QuadRam Quadboard	\$ 795
RGB Monitor	\$ 595

**Total System Price \$6558**

### SOUND

The PC has a little built-in speaker, but the sound is awful. And you can't match the Amiga's four-channel DMA sound anywhere in the computer world today. The best we can do is to add Roland's fine six-channel Compu-Music synthesizer board to our PC for \$425. Unfortunately, games and applications programs won't take advantage of our nifty synthesizer board. Their sound will still come out the tinny speaker. We'll have to write our own sound software if we want to play good music.

### GRAPHICS

The PC comes with no video output at all, ostensibly so the user can pick a video interface that matches his needs. What we need is the newest and best graphics board IBM makes: the IBM Enhanced Graphics board, at \$982 fully equipped. The EGA allows up to 640X350 pixel resolution. Unfortunately, it is difficult to program and slows down our cpu chip tremendously; it really works better on the PC/AT. But at least many software packages are now being modified to take advantage of its capabilities.

### THE RESULT

Well, now we've got an IBM PC system that has cost us \$6558. It has good sound, good graphics, a mouse-and-icon multitasking operating system, and good disk storage capacity. It is also power-hungry, slow as molasses in the Iowa wintertime, and incompatible with most of the IBM PC software on the market. It has also been expanded to near full capacity, while our Amiga is totally unexpanded and running rings around it, using only a few percent of its total capability.

Perhaps it would have been kinder to compare the Amiga to the IBM PC/AT. Its capabilities more closely match the Amiga's, but its list price is \$3995 and we'd STILL have to add almost all the options we added to the PC to make it a comparable machine (Total cost: at least \$7000). The Amiga is a genuinely top-of-the-line machine that quite simply cannot be matched by any other computer on the market today, no matter what initials are on the case. Whether the computer press, or the computer consumer, can be made to realize that is the challenge that faces Commodore now.

### POSTSCRIPT

The answer to the question of how good a bicycle the Amiga makes is this: its \$100 IBM PC emulator, written in high-level C language, runs most of the important PC software at 70% of IBM PC speed. A \$100 add-on hardware unit available this December will make it run at 100% of PC speed. By that time, the question will be moot; Amiga database, wordprocessing, and integrated software should be available by then (these products are likely to cost considerably less than their MS-DOS equivalents, while severely outperforming them.)

You can hang a lot of expensive add-ons off an IBM PC, and you still won't have an AMIGA- you'll just have an old bicycle with training wheels (& you'll have to make the motor sounds yourself...)





# THINGS TO LOVE ABOUT THE AMIGA



**A Technical Perspective**  
by: Mark R. Brown

**What is there in the guts  
of this machine that the  
hardened computer  
connoisseur can appreciate?**

**...the capacity for up to  
8 megabytes of RAM....**

**The Amiga does some  
amazing things with memory.**

The Amiga knocks everybody's socks off. The graphics are the best ever seen on a personal computer; the sound rivals the best digital audio stereo systems. Even the icon-and-mouse based operating system is something that your average Joe can appreciate. But once you get past the flashy appearances, what is there in the guts of this machine that the hardened computer connoisseur can appreciate? Plenty!

## THE CHIPS: (EVERYBODY LIKES CHIPS)

A look at the Amiga's spec sheets sets the technophile to drooling. First there is the machine's **68000 microprocessor**. While not the latest cpu chip off the drawing boards, the 68000 is certainly one of the best from a practical standpoint. It's been around just long enough to have a proven track record without being an antique. It's a true 16-bit cpu with a 32-bit internal bus, and runs at a speedy 7+ megahertz. The **Apple Macintosh** uses the same chip, running at the same speed. By comparison, the **IBM PC** uses an **8088 cpu**, an 8-bit chip with a 16-bit internal bus running at only 4.7 megahertz. Even the **IBM AT's 80286 cpu** is only a 16-bit chip with a 16-bit internal bus running at 6 megahertz. The addressing range of the 68000 also gives the Amiga the capacity for up to **8 megabytes** of expansion memory. This memory can be used entirely as user RAM, or a portion can be allocated as a ramdisk. The **IBM PC** can only handle **640K** of expansion RAM, and the **AT 3 megabytes**. While the **Mac** could address the same memory space as the Amiga, there is no hardware provision for expanding it beyond **512K**.

The Amiga does some amazing things with memory, even in the supplied 256K. This computer's blinding speed is due mainly to its memory management techniques. The memory chips are clocked at twice the cpu's speed (or about 14 megahertz), which allows the three peripheral support chips time to access memory between cpu clock cycles without interrupting the processor. These special VLSI chips (dubbed **Daphne**, **Portia**, and **Agnes** by the Amiga tech staff) control the graphics, sound, and I/O functions of the Amiga with only minimal intervention by the cpu. These custom chips (produced inexpensively in-house by Commodore's MOS Technology Microchip Division) use **Direct Memory Access (DMA)** to directly update the video display and sound output, and to service peripherals. There are **25 DMA channels** allocated to these custom controllers, which gives them almost unlimited speed and the versatility to be virtually transparent to the rest of the system. They give the Amiga its great speed advantage over the Macintosh, which, even though it uses the same 68000 microprocessor, must use its cpu chip to handle graphics, sound, and peripherals, stealing time that might otherwise be used by applications software.



# THINGS TO LOVE ABOUT THE AMIGA

**These special VLSI chips give the Amiga its great speed advantage over the Macintosh.**

**The Amiga provides for integral multitasking...**

**There are routines in the operating system to handle everything the computer can do.**

**Even UNIX is slow compared to the Amiga.**

## HARDWARE: (NOBODY DOES IT BETTER...)

The Amiga has one legacy, it seems, from preceding Commodore machines: a full complement of **built-in interfaces and ports**. Commodore users take it for granted that they'll just be able to plug in any peripherals they need. IBM users have a different experience. They must add an RS232 serial card to interface a modem, or a Centronics parallel card to interface a printer, or a controller card to even plug in a joystick. The Amiga, like the Commodore 64 and VIC 20 before it, has the ports built-in. The good news is not only that are they provided, but that they are **user programmable and configurable**, so they can be matched to virtually any peripheral without the use of special adapters and cables. There are reconfigurable RS232, Centronics parallel, disk drive, and controller ports. There are also three separate video outputs providing **composite video, RGBI, and analog RGB signals**. The sound interface is provided via two standard RCA phono jacks, and is compatible with all home stereo systems.

The Amiga's circuit board also provides two outboard ports for expansion. One, on the front of the case, is there for memory expansion. It **accepts a 256K cartridge that expands the internal user memory to 512K**. The other port, on the right side of the case, brings the Amiga's full bus out to connect to an expansion chassis or to third party add-ons, like Tecmar's multifunction expansion module, which contains an extra megabyte of RAM, a serial port, a clock/calender, and a parallel port. Unlike the Macintosh, the Amiga is indeed a **fully open-architecture machine**.

Amiga's 3.5" disk drive is no slouch, either. Formatted, the disks hold 880K of data, more than all but the IBM AT's 1.2 megabyte 5.25" drives. Read and write operations are controlled by one of the three custom VLSI chips we mentioned before, with the result that a **full 5.6K track can be read from or written to via a DMA channel in one disk revolution**. The effective throughput delivered by this technique is on the order of 500,000 bits (62500 bytes) per second (that's the equivalent of loading the Commodore 64's entire memory in one second !) -not too shabby!

## OPERATING SYSTEM: (THE BEST OF TWO WORLDS)

Many computer systems, including the Commodore 64, contain an operating system in ROM. This means that your computer is ready to run as soon as you turn it on, but it also means that the operating system is (quite literally) carved in stone, and cannot be changed. Some computers, like the IBM PC, have a small ROM which contains an auto-boot routine that loads an operating system into RAM from disk when the computer is turned on. The operating system can then





be changed and updated as easily as any application program. The disadvantage to this system is that it is quite possible to have bugs in software crash the operating system, so that it has to be rebooted from disk. The designers of the Amiga decided, apparently at the last minute, to opt for an auto-booted RAM-loaded operating system rather than an OS in ROM. This gives the Amiga future flexibility and upward compatibility with future operating system improvements and revisions. They also came up with a method that stores the operating system in an additional RAM area that is totally separated from user RAM, and which is automatically write-protected and hidden from the user once the OS is loaded in. This gives the Amiga the best of both worlds: **an operating system that can be kept up-to-date like a disk-loaded OS, but that is as inviolate as an OS in ROM.** A system reset will not wipe it out; powering down the computer is the only thing that will crash it. The OS is about 190K of code, and the Amiga has 256K of write-protectable RAM allocated to keep it in, in addition to its 256K of user RAM. **This machine actually gives you twice the memory it claims to!** It should be possible for clever programmers to worm their way into this protected area and make changes to the operating system, or to add their own routines in the write-protected RAM unused by the current operating system.

The Amiga OS is unlike any other. It provides for **integral multitasking**, not just a multitasking controller stuck on top of the code. True multitasking must be built into the way the machine does its tasks, not just juggled in from the top somewhere. While other personal computers tack multitasking on, the Amiga lives with multitasking as its resident system. **Even UNIX, AT&T's famed multitasking environment, is slow compared to the Amiga.**

The operating system, called **Intuition** by Commodore, has two user interfaces. One lets you type in command lines which the computer then interprets and processes. This is the way the IBM PC and the Commodore 64 operate. The other user interface lets you manipulate graphic icons and pull-down menus with a mouse, like the Macintosh. The user can decide which one he wants to use, or switch back and forth between the two. You can even use the icon-and-mouse version and open a screen window with the command line processor operating in it and use both interfaces at the same time! It's great to have that kind of flexibility.

There are routines in the operating system to handle everything the computer can do. Access is provided to the OS routines via Kernal-style jump tables, so C and assembly language programmers can hook into the internal capabilities of the Amiga without having to "reinvent the wheel". BASIC includes commands to handle all of the Amiga's functions, including graphics, animation, sound, and multitasking, without having to resort to machine code subroutines. **PEEKs and POKEs are obsolete** on the Amiga (though they are still allowed in Amiga BASIC).

One striking testimony to the power inherent in the Amiga's OS is its **IBM emulator**. This software program emulates an IBM PC, allowing you to run most of the popular PC software on the Amiga. And even though it is written entirely in high-level C language, it runs at 70% of PC speed. Many PC clones don't run as well. Cost? \$100. A hardware add-on to bring the PC emulator up to full speed will be available by December for an additional \$100.

## GRAPHICS: (NO CONTEST)

Two of the three custom chips in the Amiga are dedicated to graphics and animation. The graphics are controlled by a custom CPU contained on one of these custom chips. It's called the **Copper**. The Copper determines the priority of the various graphic elements involved in a screen display, and routes them all to the right place at the right time. With two playfields, unlimited BOBs, and eight sprites to police, the Copper is a busy bit of silicon!

Graphics can be displayed in **five different resolutions**, up to 640X400 pixel resolution in 4096 colors. The main graphics screen is composed of three combined elements. The first is the **playfield**. There are **five bitplanes** of information in the Amiga screen, which can be interpreted as one or two overlaid playfields. For example, if you want to give the illusion of depth in a scrolling display, you can scroll a background playfield along slowly while you scroll the foreground playfield more rapidly. The second graphics screen component is the **BOB, or Blitter Object**. These are graphics shapes which can be defined and overlaid on the screen by the **Blitter** (Bit-Block Transfer device). They behave much like sprites, but are actually drawn onto the graphics screen rather than overlaid on it. The third graphics component is, of course, the **sprite**. There are just eight of them, sixteen bits wide by as tall as you want them. They can contain up to three colors each. Sprites behave just as they do on the Commodore 64, hovering over (or under) the screen itself.

Operating system routines control the various graphics elements automatically. You need never worry about which sprite number you are currently using. There are even routines to automatically animate objects and groups of objects without further program intervention. And Amiga's **BASIC** allows access to all of these functions!

## SOUND: (HOW SWEET IT IS)

The third custom chip controls peripheral devices and sound output. There are four channels of DMA sound, mixed and delivered as stereo output. The technique used to generate the Amiga's sound involves digitally specifying a sound's characteristics in memory, and then reproducing that digital fingerprint at playback. The operating system includes sound tables with **predefined voices**, or you can program them yourself. The Amiga, properly equipped with an additional interface, can also take in a sound source and digitize the information (**digital sampling**). The process is so good that it is possible to produce excellent speech directly (in fact, Amiga is the first PC to come with built-in, recognizable, **male & female speech synthesis!**) The text-to-speech algorithms reside in the operating system and are also available thru simple commands in BASIC.

## CONCLUSION: (I COULD GO ON...)

The Amiga is one awesome piece of computer. From the chassis to the operating system, it has been designed with the future in mind. There is a lot for the technophile to love in the Amiga, but the real joy of this machine is that the advanced features and functions have been made accessible to the user, so that even those who have no real technical interest can make use of the advanced features built into it. The Amiga is, quite simply, a **superior personal computer**.

INFO



# AMIGA

## things we'd (already) like to see:

The Amiga is a marvelous machine; but nothing is perfect, and journalists are picky by nature. So let's take a moment to list the improvements that could be made to the Amiga, if cost were no object:

(1) The graphics resolution could be improved. 640X400 resolution is not pushing the limits of today's technology (though it does push the limits of inexpensive color monitors). **1024X1024 resolution** will probably be the standard for the next generation of Amigas. It should be noted that the software allows for a scrolling virtual screen of almost unlimited size in the present Amiga, so you could use a 1024X1024 screen, even though you can't display it all at once.

(2) The palette of **4096 colors** is more than adequate, but the implementation generally limits you to 32 colors at one time. We're glad the Amiga has a hold-and-modify mode that will allow you to display all 4096 colors within limitations, but it would be nice to be able to access them all directly, in all resolution modes.

(3) The software nicely gets around the limitation of 8 hardware sprites, but **64 sprites** sounds like a better number to me. The horizontal resolution limitation of 16 pixels could be expanded, too, preferably to unlimited width.

(4) The graphics architecture features five bitplanes of information that can be combined to provide one or two independent overlaid multicolor playfields. The capability to use them individually for up to **five overlaid monochrome playfields** would have been marvelous. But two is a nice compromise for now.

(5) The standard Amiga has 256K of memory. We think time will establish **512K** as a more acceptable figure, especially since the graphics and user RAM are shared in the basic machine. Most Amiga users will probably want to upgrade to take advantage of the full capabilities of this computer.

(6) The Amiga is capable not only of multitasking, but **multiusers**. There is now no provision to take advantage of this capability. We would like to see Commodore come up with an **AmigaNet network** that would use C128s as user terminals to access an Amiga equipped with a printer and a hard disk. This would allow users to exploit the full potential of the Amiga, and would sell a lot of C128s for Commodore, too! (Unconfirmed sources say that an Amiga network is on the drawing board.)

(7) About that keyboard: it's wonderful that the Amiga is using the industry standard Selectric keyboard layout (something IBM has been heavily criticized for NOT doing) but why on earth didn't they use the extra space above the numeric keypad to include the missing three math operators (you know, add, multiply, & divide) ??? Just imagine how happy an accountant is going to be using a **warp-speed spreadsheet** with a keyboard that makes him/her grope around the keyboard looking for those oft-used symbols that should be wrapped around the number pad. This is an unbelievable oversight on a machine which is, in every other respect, so well thought-out! This may actually be the single worst flaw in the Amiga design.

(8) It is almost criminal of Commodore/Amiga to introduce a machine like the Amiga without simultaneously introducing a low-cost **laser printer**. The fact that the Amiga is virtually begging to be used as a self-contained magazine-making machine has not been lost on us at INFO, but we will need publishing software (3rd parties will surely rise to the occasion) and full-featured laser printers at Commodore-scale prices (get to work on it, C/A !)

Those are our initial thoughts. We're sure we'll see more as we work with the Amiga. It's interesting to note that all but the last suggestion have been relieved to some extent by the design of the machine: either software compensates for shortcomings by allowing for emulation of better features, or hardware provides for expandability. Commodore/Amiga has done a wonderful job this time of anticipating user needs and desires; the more we look at this machine, the more respect we have for it.





## THE GOOD

The new **AMIGA** personal computer from Commodore International is a machine to rekindle the enthusiasm that drives personal computing...Dazzling graphics and sound and an open expansion bus make the **AMIGA** the intellectual and technical heir to the Apple II...All the dazzle does nothing to inhibit the **AMIGA**'s performance in any serious application.

Phil Lemmons  
Editor in Chief  
Byte Magazine  
August 1985

This editorial treatment from Byte is in sharp contrast to the way they have effectively ignored Commodore computers for years. Obviously, the **AMIGA** is too good for the mainstream personal computer press to ignore, no matter whose logo is on the case.

The interlocking features of the **AMIGA**...point to a complexity of hardware design that we have not seen before in personal computers. (It's interesting to note that the Macintosh's complexity is in its software and that, according to several third-party developers who have used both computers, the Macintosh is harder to program.)

Williams, Edwards & Robinson  
"The **AMIGA** Personal Computer"  
Byte Magazine, p. 83  
August 1985

This article is the most comprehensive and informative technical article to date on the **AMIGA**.

**AMIGA** makes real what had previously been only a vision in the microcomputing world. Before the **AMIGA**, such power, speed, sound, color, and animation capabilities weren't commercially available for under \$20,000. Now, everyone will have an opportunity to experience this computing breakthrough.

Steve Twombly  
Publisher  
**AMIGA** World Magazine  
Premiere Issue

Obviously, Mr. Twombly is not going to bite the hand that feeds him. The unusual thing about this comment is that we've found it restated in much the same glowing prose in the majority of the published commentary about the **AMIGA**, and from a wide cross-section of people who don't have their livelihood tied up in the machine. The main curiosity about his comments is that they aren't more glowing than the rest, but are representative of the norm.

In emulation mode the **AMIGA** can run about 75 percent of all IBM PC software, even some of the tough ones like Lotus 1-2-3 and Flight Simulator....Commodore claims that the **AMIGA** can run all of the PC software in the Softsel Top 20 list.

Computer Buyers' Guide and Handbook  
"Commodore **AMIGA**"  
November 1985

CBG&H cites an important aspect of the **AMIGA**'s IBM PC Emulator program: that it will run the top programs for the PC. Not all, but the best, including Lotus 1-2-3. Even a 99 percent IBM PC emulator would be of no use if the one percent it omitted were the most useful few PC programs. Fortunately, the **AMIGA**'s emulator handles all the best sellers. That will be an important factor in the transitional phase. We've heard of one corporate purchaser who had pre-approval to purchase IBM PC-compatible computers; after seeing the **AMIGA** in New York, he ordered PC-compatible **AMIGAs**!

I am glad that quality features, such as the **AMIGA** has, are being pursued (by manufacturers) after so long a time in which PCs deviated from their initial direction in the name of productivity. My hopes are that the basic structure of the **AMIGA** will remain static for a decade and that related forms of support, including software packages, will abound. A product such as this one goes a long way toward (finally) realizing practical technology. Therefore, trade-offs and rapid knock-offs or changes are less likely.

Steve Wozniak  
cofounder of Apple Computer

The Woz is a notorious technology junkie, and naturally the **AMIGA** appeals to his sense of wonder no matter who makes it. It's no secret that he left Apple over their decision not to produce his new wonder computer, the Apple IIX. I'm sure he's right about the **AMIGA** setting a new standard, and I'm equally sure that he wishes his machine had been the one to do it.

It's the first piece of technology to truly demonstrate to the world that the computer is a new kind of medium. We've always had this vision of the computer as a new medium, a media machine, like the VCR, television, or stereo. The **AMIGA** fulfills this vision because it, too, is a media machine.

Bing Gordon  
Electronic Arts

Is this computer really that different, that it could be a whole new medium, a whole new way of looking at things? Read on.





## THE GOOD

It's a challenge to software companies to think in entirely different ways. For the first time ever, we've got a much less limited platform on which to work, whereas before, we couldn't fully realize the things we wanted to do. With the **AMIGA**, you've got two important concepts. First, you'll see applications emerge that were never before possible, and second, and equally revolutionary, you'll see entirely new approaches to applications that already exist, especially in vertical market software.

Brian Lee  
Synapse Software

The software people love this machine because it opens the doors for them to do what they always imagined, but couldn't transfer into the machine.

The **AMIGA** will gain the kind of widespread acceptance that we never imagined another machine could have. It's going to be the next Apple II.

Bobby Kotick  
Chairman  
Arktronics

This argument seems to crop up alot. The Apple II was the first home computer to exploit color and graphics. It was revolutionary. The **AMIGA** has that same kind of feel, of wonderful new horizons opening up.

Next to the **AMIGA**, the ST is pale in comparison. **AMIGA**'s colors are brilliant; Atari's are pastel. **AMIGA**'s capabilities definitely outshine the ST, the Mac, the Mac XL, and everything else I've seen to date.

Dr. Eydie Sloane  
The Sloane Report  
July/August 1985

In a side-by-side comparison, we concur that there is no comparison of the **AMIGA** to any other personal computer. We should be able to present a hands-on look at the **AMIGA** vs. the Atari ST next issue.

The **AMIGA** is an important product. We see a significant, lasting change in the way computers will be used and programmed....With the introduction of the **AMIGA**....and the ST from Atari, consumer computing will never be the same again.

Lock & Mansfield  
Editors  
Compute! Magazine  
September 1985

We'll argue the significance of the ST. It's highly touted as a "color Macintosh", yet it addresses only two of at least seven significant problems with the Macintosh, color and price. The **AMIGA** capably overcomes these two problems, and also addresses the Mac's difficulties involving cpu speed, disk storage capacity, disk access speed, expandability, and PC compatibility. The ST still suffers from all of these problems. Add in the complete lack of any software to run on it, and the ST deflates into the fancy game machine it really is.

There is not much use in trying to describe the **AMIGA** much more than we already have....The fact is that until you see and hear it in operation, you cannot know what it really is.

John J. Anderson  
"AMIGA: The Message is the Medium"  
Creative Computing  
September 1985

Here the nail is hit on the head. Until you experience an **AMIGA**, you can't imagine what it's like. It is so different than your average computer.

Imagine, if you can, a computer that is capable of doing almost anything you could dream of wanting to do....Welcome, dear friends, to the world of the **AMIGA**.

Randy Chase  
Publisher  
The Guide  
July 1985

This is about the most reserved comment that Randy has made to date about the **AMIGA**. I've got to admit, we feel the same way about it: it's a Dream Machine.

## THE BAD

The **AMIGA**, at \$1,295, seems designed primarily for the home user, though with the right software there's nothing stopping you from using it in your business. In fact, compared to the existing heavyweight, the IBM PC, the **AMIGA** will process words, numbers, and other data faster and more efficiently....All this talk of fancy hardware, color, and easy-too-use software is fine, particularly if you're into games (which will be in plentiful supply). But so far, there are no worthwhile business programs available for the **AMIGA**. It'll take time for these programs to come out, but it will happen. The **AMIGA** is too powerful for software publishers to ignore. The speed at which the **AMIGA** operates makes way for incredibly fast programs.

"Commodore **AMIGA**"  
Computer Buyers' Guide & Handbook

The **AMIGA** seems to confuse people. Since it's from Commodore, they want to classify it as a "home computer", though Commodore has promoted it as a personal and small business machine. The article quoted here never seemed to make up its mind about the **AMIGA**; they were obviously sold on the machine, but weren't sure whether they should really step out and call it a good business computer. Many others seem to have had the same problem.





## THE BAD

...few software houses attended the opening and few have said they would be designing programs to run on the machine.

USA Today  
July 24, 1985, p.24

This comment was taken from the comprehensive one-paragraph article that USA Today hid on page 24 to trumpet the arrival of the **AMIGA**. A cover story the day before the announcement said "But is the market ready for the MTV of computers, a machine that can growl in stereo like an electric guitar and brilliantly animate color pictures?" I don't know about you, but this is the way I want all my news in the future: front-page speculation the day before an event, followed by a succinct paragraph once the facts are in. By the way, the **AMIGA** premiered with more software packages completed and ready-to-run than any personal computer in history.

## THE UGLY

The introduction of new machines and operating systems is healthy for the industry. The user is intelligent enough to choose the better operating system. A customer will buy an Atari ST machine because it is a better machine for a lower price. That is our slogan--power without the price.

Jack Tramiel  
Chairman of the Board  
Atari Corporation  
Former Chairman & CEO  
Commodore International



I hope "Uncle Jack" is right on this one. Considering the long and costly court battle he and Atari went through to try and obtain the rights to produce the **AMIGA** instead of Commodore, HE obviously knows which is the better computer!

High-tech features can be dazzling, but when it comes to laying out one's own cash, the user-benefits from a tried and proven product, from a highly reputable manufacturer are still tremendously important. While their focus (Atari and Commodore) on graphics is an endorsement of the user interface concepts introduced by us, we do not see a great future for our company in trying to establish ourselves as just a consumer marketer. There is no evidence yet that consumers will be willing to pay high enough prices for dazzling graphics to make such products profitable for both the manufacturer and the dealer.

John Sculley  
President and CEO  
Apple Computer

This comment really begs to be analyzed line by line, so here goes: (1) Sculley's snipe at Commodore, implying it is not a "highly reputable manufacturer" is in incredibly bad taste. Commodore definitely has a "low-end" image to live down, but they've been in business and delivering product longer and in larger quantities than Apple has. In fact, last year (when both were still turning a profit--they're both losing money now) Commodore reported profits of \$144 million on sales of \$1.3 billion, compared to Apple's profit of \$64 million on \$1.5 billion in sales. Apple and Commodore are not only in the same game, they are in the same ballpark. (2) Apple did not introduce the "user interface concepts" involving icons and windows that is used in the Macintosh, but borrowed them themselves from Xerox Corporation's Star System and Smalltalk environment. (3) Apple is a "consumer marketer" just like Atari and Commodore. They have failed miserably to get the Mac into the Fortune 5000 companies, and shamelessly snub their own Apple IIe, whose sales are still paying the rent at Apple Computer headquarters, because they want to have a "corporate" image like IBM. (4) The only ones willing to "pay high enough prices for dazzling graphics" in the Mac have been home users, and they've paid a lot more for its small black and white screen image than **AMIGA** owners will be paying for full color. (And, we should add, got a lot of other headaches in the bargain.) I think Sculley's afraid of a good, inexpensive "color Mac" of the calibre of the **AMIGA**, and is doing his best to help fortify Commodore's "low-end" image.

I'd like to know how many businessmen design bouncing balls or write music.

C. Roger Lewis  
ComputerLand Corp.

A true visionary.

We believe the leading edge is often the bleeding edge in this business. We'll wait until the product has proven itself.

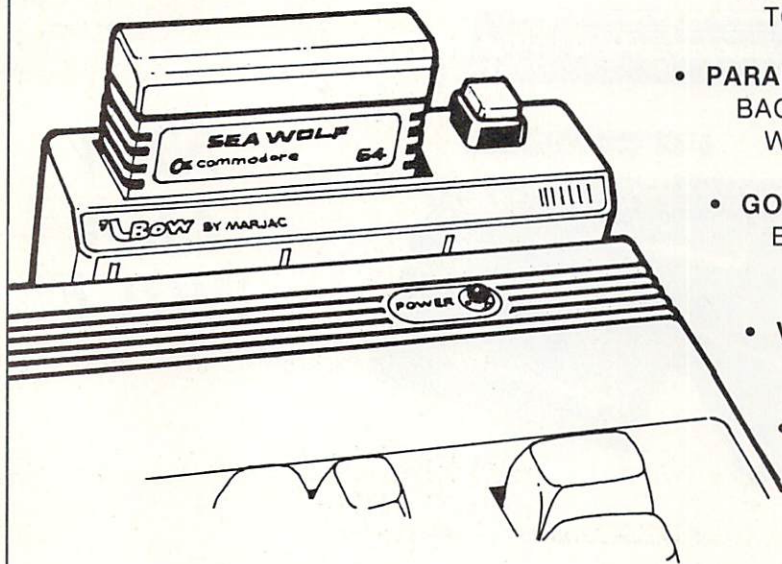
James J. Edgette  
Entre Computer Centers Inc.

A prime example of the hearty pioneer spirit that made this country great.





# 'LBOW™

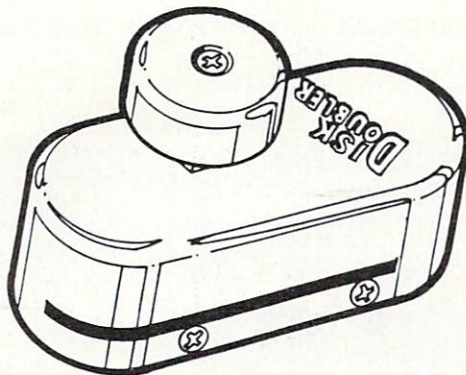


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# INFO READER INPUT

You will notice that many products in the product roundup remain unrated. The reason is simple: with a staff of 3, we have to be very selective, focusing on items that we feel are the most important and interesting. Here's your chance to participate in the INFORMATION AGE: if you see an unrated product which you feel qualified to rate, please fill out the form below, cut this page out, fold and mail it to INFO. If we get 5 or more ratings on a product & at least 4 of them are in agreement, we will enter a "reader rating" for that product in future roundups. -B.D.

# HELP



## Reader Consensus Rating Form

Product \_\_\_\_\_  
Company \_\_\_\_\_  
Category \_\_\_\_\_  
Rating 

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Comments \_\_\_\_\_  
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Similar Software You Have Used:

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City/St. \_\_\_\_\_  
Phone \_\_\_\_\_  
Qualifications: \_\_\_\_\_

Cut on dotted line →



# PRODUCT ROUNDUP

## FALL 1985

### INDEX



#### SOFTWARE

Arcade & Action Games.....	63	...	124
Business Accounting.....	37	114	122
Conventional Games.....	69	...	124
Database Managers.....	45	117	122
Disk Copiers.....	58	...	...
Educational (advanced)...	89	...	...
Educational (general)...	86	...	...
Educational Games.....	80	...	126
Graphic Adventures.....	72	...	125
Graphics.....	46	...	122
Integrated Software.....	36	114	121
Misc. Recreational.....	85	...	...
Misc. Software.....	92	120	126
Music Hardware.....	49	...	...
Music Software.....	49	...	123
Personal Finance.....	40	115	...
Personal Enrichment.....	52	...	...
Programming Tools.....	54	...	123
Programming Languages...	55	118	123
Spreadsheets.....	42	116	122
Strategy & Simulation....	74	...	125
Teaching & Admin.....	90	...	...
Telecomputing Software...	51	118	123
Text Adventures.....	70	...	125
Utilities.....	60	119	...
Wordprocessing.....	43	116	122

#### HARDWARE

Data Acquisition & Ctrl.	100	...	...
Displays.....	106	...	...
Gadgets, Cables, & Etc..	102	...	...
Input Devices.....	105	...	127
Interfaces.....	96	...	126
Mass Storage.....	101	...	126
Miscellaneous Hardware..	108	...	...
Printers.....	107	...	...
Sensory Peripherals.....	104	...	127
Telecomputing Hardware..	99	...	123

#### INFORMATION

Books.....	112	...	...
Information Services....	110	...	...
Magnetic Information....	113	...	...
Periodicals.....	110	...	...

Once again we are proud to bring **INFO** readers the most comprehensive reference guide to **Commodore** products available anywhere for any price!

We have tried to make this guide as complete and current as possible, but with so many products there are sure to be some mistakes (for instance, the listing for COMAL 2.01 comes at the end of pg. 54, just **before** the heading for languages!) This time we have provided a mechanism for readers to not only catch and correct our mistakes for the benefit of future roundups, but also to participate in the rating and review process via a **READER CONSENSUS** rating form (see page 34). With your help, and only a few minutes of your time, we will be able to make the **ROUNDUP** a truly cosmic work from which all may benefit.

#### HOW TO USE:

Entries are listed in the three groups by category. Under each category, products are (for the most part) arranged in order of star ratings (highest first) and then alphabetically. **UNLESS SIGNED OTHERWISE, THE COMMENTS PRINTED WITH THE ENTRY ARE THOSE OF THE MANUFACTURER** (buyer beware). Where we have supplied the comments, the initials of the commentator will appear. (Note all artwork and photos in the roundup were provided by the manufacturers)

Below is the standard format for a typical entry.

PRODUCT NAME **C64 C128 CPM Amiga**

Manufacturer **Tape Disk ROM**

\$Price **Format**

for: MACHINE **\*RATING\*** **1 to 5 Stars**

These comments about the product are from the manufacturer unless noted below.

--(Author)-- **BD Benn MB Mark Staff**



## INTEGRATED SOFTWARE



One software package incorporating several applications, usually spreadsheet, database, and business graphics.

### Vizastar

Solid State

\$ 119.97 Disk & ROM \*\*\*\*\*

for: C64 C128

1000 x 64 cell spreadsheet with 10k RAM available (14k with the XL8 version for extra \$\$\$). Powerful spreadsheet commands, windows, DBMS, graphics, pie and bar charts, menu-driven and easy-to-use. Need we say more than it's the C64's answer to 1-2-3!

(-Staff) See review, Issue #7

### Magic Desk

Commodore

\$ 49.95 ROM \*\*\*

for: C64

Introduced back in the days of ICON-mania, Magic desk turned out to be more HYPE than HELP.

(-Staff)



### CCI Bottom Liner (serial)

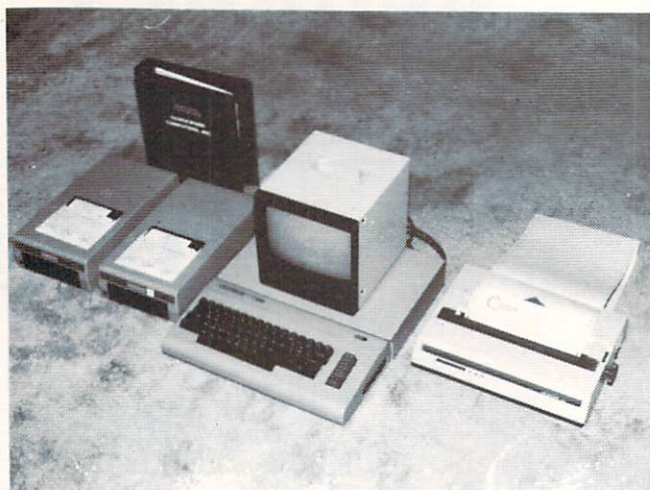
Clockwork Computers

\$ 84.95 Diskette

for: C64 C128

Similar to the 'CCI Bottom Liner Plus (IEEE)' but for serial connect disk drives.

>>>> Circle Reader Service No. 10 <<<<



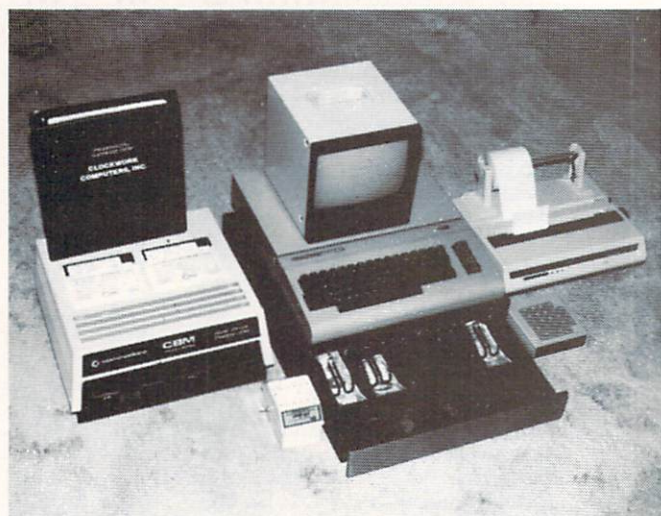
### CCI Bottom Liner Plus (IEEE)

Clockwork Computers

\$ 154.95 Diskette

for: C64 C128

An expandable accounting system (single or double entry) for home or small business. Prints checks, invoices & statements; computes cash flow, bank balance, trial balances, accounts receivable, and net worth. Manual includes several examples. Requires a C64, C128 or B128; two 1541s (or equivalent) or 8050 or SFD1001.



### CCI Merchandiser Plus (IEEE)

Clockwork Computers

\$ 399.00 Diskette

for: C64 C128

A complete POS system for retailers and distributors for handling cash, checks, credit cards, COD, charge sales and refunds. Adjusts up to 5000 inventory items as you make sales. Includes invoicing, price tagging, accounts receivable, sales & profit forecasting. Requires a C64, C128 or B128, 8050 or SFD1001 drive, a C-Link-2 I/F and a okidata printer. Cash drawer optional.

>>>> Circle Reader Service No. 11 <<<<



### HomePak

Batteries Included  
\$ 49.95 Diskette  
for: C64

Word processing, information management and telecommunications on a single disk. Programs work with each other.

### Intelligent Software Package

Intelligent Software  
\$ 35.00 Disk or Tape  
for: C64 C128

22 useful programs for the home or office on one disk. Includes database, word processor, spreadsheet, report generators, checkbook, inventory, loan and more.

### Jane

Commodore  
\$ 75.00 Diskette  
for: C64 C128

A mouse & icon based integrated system: wordprocessing, spreadsheet and filing, all on one screen at the same time. Available for the C64 and C128 with both versions under \$75.00.

### SuperClerk

Kobetek Systems  
\$ :na Diskette  
for: C128

A new package under development by Kobetek Systems for the C-128. Word processor, filing functions (simple database), calculator, typewriter, and accounting functions. User friendly and programmable.

### Supershipper

Progressive Peripherals  
\$ 99.95 Diskette  
for: C64

Complete multi-printer shipping system. Stores info for up to 800 customers, 500 invoices, and 200 products on each account and invoice disk. Prints invoices, COD tags and shipping labels. Sorts customers and products for printing lists.

### Totl. Writer

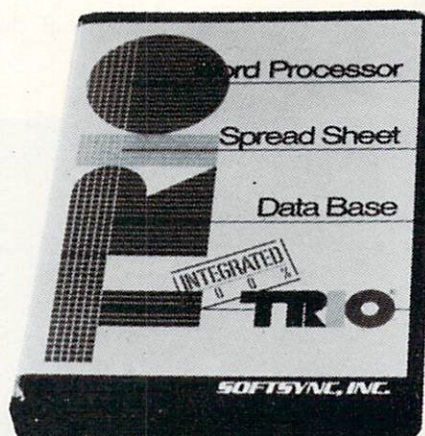
Totl Software  
\$ 79.95 Diskette  
for: C64

Fully integrated word and data management system. Provides a 24,000 word spelling checker (with room for 10,000 customized words).

### Typro-64

Input Systems  
\$ 59.00 Diskette  
for: C64

Data base and word processor. Mail merge, labels, sorting, acoustical phone dialing from database and more.



### TRIO

#### Trio

SoftSyn  
\$ 69.95 Diskette  
for: C64 C128

Offers the three most essential computer programs (word processor, spread sheet and data base) on a single disk. Full integrated so information can be exchanged between programs. Each program has continuous on-screen commands for easy reference. Plus pull down help windows for instant on-screen help in progress.

### BUSINESS ACCOUNTING



There's no accounting for how many of these programs there are. Every business needs to track their cash.

#### Accounts Payable/Checks

Commodore  
\$ 49.95 Diskette \*\*\*+  
for: C64

Commodore's somewhat stripped-down version of the Info Designs package.  
(-B.D.)

#### Accounts Receivable / Billing

Commodore  
\$ 49.95 Diskette \*\*\*+  
for: C64

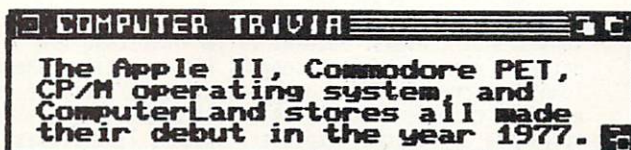
Commodore's somewhat stripped-down version of the Info Designs package.  
(-B.D.)

#### Cash Management System

Computer Ease  
\$ 40.00 Diskette \*\*\*+  
for: C64

Cash accounting system. For small businesses, professional or personal accounting needs. Covers expense, income, a/r, and cash accounts at month end and more.

(-Staff)

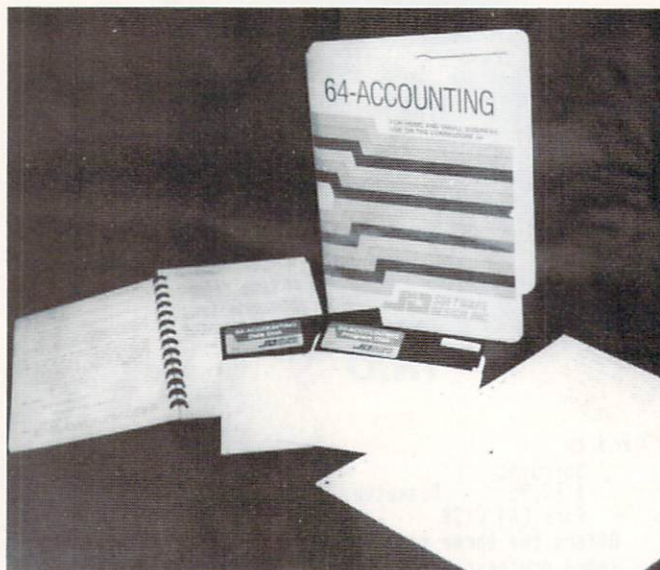




## General Ledger

Commodore  
\$ 49.95 Diskette \*\*\*+  
for: C64

Commodore's somewhat stripped-down version of the Info Designs package.  
(-B.D.)



## 64-Accounting

Software Design  
\$ 69.95 Diskette  
for: C64

'Versatile and easy to use' system designed for personal and small business accounting. General ledger with a mini-accounts receivable/payable. Provides financial statements, detailed trial balances, check writing, statement printing, and check book reconciliation.

>>>> Circle Reader Service No. 3 <<<<

## Accountant, inc.

SoftSync  
\$ 59.95 Diskette  
for: C64 C128

Small business accounting package, includes sales analysis, accounts receivable, profit/loss statements, income/expense statements. A complete general ledger, accounts payable/receivable and inventory management system. Generates sales purchase, cash receipts, disbursements journals and a multitude of reports.

## B.E.S.T. Accounts payable

B.E.S.T.  
\$ 59.95 Diskette  
for: C64

Easy to use payables system, with automated file creation, screen guided data entry, check writing for one or all end-of-month checks. Maintains last 45 active transactions for each of 100 accounts per data disk. Integrates with BEST's General ledger.

## B.E.S.T. Accounts Receivable

B.E.S.T.  
\$ 59.95 Diskette  
for: C64

Easy to use receivables system, with automated file creation, screen guided data entry, interest charges and statement (billing) printing. Maintains last 45 active transactions for each of 100 accounts per data disk. Integrates with BEST's General Ledger.

## B.E.S.T. General Ledger

B.E.S.T.  
\$ 69.95 Diskette  
for: C64

A complete ledger with 200 g/l accounts. Automated check writing, and posting to a/r, a/p, and g/l accounts. Includes year end reports and 24 month histories. For one or two drives.

## B.E.S.T. Inventory Management

B.E.S.T.  
\$ 69.95 Diskette  
for: C64

A complete system for managing up to 1500 inventory line items per data disk, with recall of any item in less than 2 seconds. Screen guided data entry, print invoices and purchase orders using standard forms and more. 1 or 2 drives.

## B.E.S.T. Project Planner

B.E.S.T.  
\$ 89.95 Diskette  
for: C64

Complete easy to use professional quality project planner. Time constraints planning for large or small projects, with flexibility for re-evaluating schedules, and to identify and respond to changes in project implementation.

## Bec

Lawco  
\$ 29.95 Diskette  
for: C64

Computes the break even point for new products using expense data and the sales price to break-even quantity or the expense data and the quantity produced to compute a break even sales price.

## Bottom Line

Midwest Software  
\$ 35.00 Diskette  
for: C64

A simple general ledger program for home, school or business. Up to 99 different account titles may be defined. Approximate capacity of 80,000 entries with additional data disks.

## BSC Bookkeeper

Business Systems & Conversions  
\$ 39.00 Diskette  
for: C64

Complete record keeping system developed by a CPA. Menu controlled, records always in balance, no accounting training needed. Automatic monthly and year-end close. Current bank balance instantly available at all times. And lots more.

## Business Ware Series

Peripherals System of America  
\$ 29.95 Diskette  
for: C64

5 accounting programs for \$29.95 each, Business Man, Bill Collector, Bill Payer, Pay Master, and Widget Tracker.

## CCI Invoice/Statement & Acct.

Clockwork Computers  
\$ 154.95 Diskette  
for: C64 C128

Consists of 2 disks. Disk#1 is for invoicing and printing spread sheet statements for situations where identical commitments and invoice items are billed to multiple clients. Disk#2 is a full accounting system to handle all income, expenses, assets, liabilities, and equity. Requires C64 or C128 with 2 1541s, 8050 or SFD1001 drive.



### CCI Mortgage

Clockwork Computers  
\$ 154.95 Diskette  
for: C64 C128

Based on the CCI Bottom Liner program with the additional function of posting mortgage payments for up to 98 mortgages per disk. Client file maintains address, phone number, pertinent mortgage data, etc. Provides amortization and loan schedules. Requires C64 or C128, two 1541s (or equivalent), 8050 or SFD1001.

### CCI Property Rental

Clockwork Computers  
\$ 79.95 Diskette  
for: C64 C128

A complete unit rental management package, that can search for availability, make reservations for specified times and calculate rental charges. Maintains agents, owners, and unit files. Prints invoices and statements with aging, income and expense reports. Requires C64 or C128, a single 1541, and printer.

### CMS Accounting System

CMS Software  
\$ 179.95 Diskette  
for: C64 C128

Integrated general ledger, accounts receivable/payable, billing, job costing, and payroll.

### ESI Time Biller

Electronic Software Inc.  
\$ 89.00 Diskette  
for: C64

Complete time accounting and client billing system used by attorneys, accountants and consultants. User definable activities and expense codes, multiple billing rates, pre-billing review and more.

### Fab Business

Fabtronics  
\$ 47.95 Diskette  
for: C64 C128

Invoice, packing list and mail labels in plain paper or commercial format.

### Fill-a-form

Fabtronics  
\$ 19.95 Disk or Tape  
for: C64 C128

Printout of many business/commercial forms.

### Inventory D-Base

Fabtronics  
\$ 27.95 Diskette  
for: C64 C128

Inventory program with extensive report capabilities, including pricing variations.

### Invoicer V2.0

MiccaSoft  
\$ 59.95 Diskette  
for: C64

Fast and simple invoicing program. Create a database of accounts and stock items which can be recalled while invoicing. Custom modifications available.

### Mini-Ledger

Paradigm Consultants  
\$ 150.00 Diskette  
for: CP/M

Ledger program for small businesses.

### Money Manager

Timeworks  
\$ :na Diskette  
for: C64

A series of easy to use management information reports flexibly designed to accommodate all small business and medium sized business requirements. 16 budget and actual categories can be entered on monthly basis for 1 year period.

### MP+ 2.0

Lawco  
\$ 39.95 Diskette  
for: C64

Management planning that allows the user to set objectives, define the activities needed to reach these goals, and identify the resources required for each activity.

### Retail Invoice

CodeWriter  
\$ 19.99 Diskette  
for: C64

Contains everything a retail invoice should, allows for point of sale invoice.

### Sales Force

Batteries Included  
\$ :na Diskette  
for: C64

Unique sales management program that takes care of the administrative details for you, client files, report generating, memos and mailing labels.

### Small Business Applications

CodeWriter  
\$ 19.99 Diskette  
for: C64

Three separate programs for 19.99 each for the small businessman. Includes Accounts Receivable, Accounts Payable, and Payroll Program.

### Small Business Inventory

CodeWriter  
\$ 19.99 Diskette  
for: C64

Fields include: stock number, date, desc., shipped to/received from, quantity ship/received, cost, totals and more.

### Supershipper Accountant

Progressive Peripherals  
\$ 79.95 Diskette  
for: C64

Use with the Supershipper to print sales, receivable and inventory control reports and bank deposits.

### Tenant File

Fabtronics  
\$ 19.95 Disk or Tape  
for: C64 C128

Maintains a record on each tenant with 22 fields of info.

### Totl.Business 3.6

Totl Software  
\$ 95.00 Diskette \*\*\*\*  
for: C64

Integrated small business accounting package: a/r, a/p, inventory, invoices, statements, purchase orders. Interfaces with totl's general ledger, label and database programs. A top quality package with product files, tax files, etc. Well documented.

(-B.D.)



## Totl.Ledger 3.6

Totl Software  
\$ 44.95 Diskette  
for: C64

Can be used stand alone or with totl.business.  
Maintains 12 months of business data and produces  
trial balances, balance sheets, income & expense,  
profit & loss statement reports.

## Utility File

Fabtronics  
\$ 27.95 Disk or Tape  
for: C64 C128

Meter reading data processing program to calculate  
usage, store and print results including daily  
averages and totals.



## Certified Personal Accountant

Progressive Peripherals  
\$ 79.95 Diskette \*\*\*\*+  
for: C64

This is the easiest to use, best documented, sensibly  
put together personal finance package we have seen  
yet. Gives you a real sense of confidence and guides  
you sure-handedly thru all phases of set-up and  
routine use. Extensive help screens & tutorial.  
Formerly marketed by Sundex.  
(-B.D.)

## Financial Cookbook

Electronic Arts  
\$ 49.95 Diskette \*\*\*\*+  
for: C64

One of the handiest little packages for the average  
person trying to figure out whether to buy/rent or  
save/invest, etc. I used this recently during the  
sale and purchase of our home and will use it before I  
buy a car or open a money market account.  
(-B.D.) See review, Issue #4

## Complete Personal Accountant

Future House  
\$ 79.95 Disk or Tape \*\*\*\*  
for: C64

A solid set of personal finance tools, includes a  
unique self-running demonstration program on the  
flip-side of the disk, which makes first-time fairly  
painless.

(-B.D.) See review, Issue #2

## Personal Accountant

SoftSync  
\$ 34.95 Diskette \*\*\*-  
for: C64 C128

Double entry bookkeeping/ maintain checkbook, credit  
cards, loans/reports including trial balances,  
profit/loss, expense vs. income, assets vs.  
liabilities. Amortization tables and address book  
functions.

(-B.D.)

## The Home Accountant

Continental Software  
\$ 79.95 Diskette \*\*+  
for: C64

This could be an excellent package, unfortunately, the  
product in it's present condition can not be  
recommended: slow disk-accessing routines result in  
unacceptably long delays during routine processing.

(-B.D.) See review, Issue #2

## Amort-64

Input Systems  
\$ 29.95 Diskette  
for: C64

Amortization program that displays to screen or  
printer for hardcopies.

## Cost&Value of Retirement Fund

Perfas  
\$ 48.00 Diskette  
for: C64

The centerpiece of the software package is the book,  
who's core is a set of calculation procedures that  
enable the reader to evaluate the cost and value of a  
retirement or savings fund, taking into account  
investment return, taxes, and inflation over the life  
of the fund. Program executes all the book's  
calculation procedures allowing the user to  
concentrate on the tutorial.

>>>> Circle Reader Service No. 12 <<<<

## Course I: Investments

Wizards  
\$ 54.95 Diskette  
for: C64

Numbers oriented course for serious real estate and  
stock market investors. Includes 120 page text,  
investment newsletter, and accounting tutor.

## Electronic Checkbook

Timeworks  
\$ :na Diskette  
for: C64

Check recording, sorting, and balancing system that  
interfaces with Money Manager for budgeting.

## EZ-Checking

Genesis Software  
\$ 29.95 Diskette  
for: C64

Personal checking program using fast ISAM files.  
Searches on five levels, printed reports, screen  
displays same as paper checks.

## Financial Planner

Timeworks  
\$ :na Diskette  
for: C64

Personal financial planner by Sylvia Porter. Covers  
checkbook, budget preparation, financial statement  
preparation, financial inventory tracking and tax  
aids.





## Home Finance Manager

Cardinal Software  
\$ 49.95 Diskette  
for: C64

Complete mini-financial management program. Maintains all of the details of home finance record keeping, with the ability to store in excess of 200 transactions per month. Keeps detail records of tax deductions, bank payments, monthly charges, check transactions, and individual item expenses. Detailed printouts and charts, annual reports, etc.

## Investment Advisor

MiccaSoft  
\$ 69.95 Diskette  
for: C64

Complete financial analysis tool sophisticated enough for the serious investor, yet simple enough for the novice. Includes individual federal income tax planning.

## Investors Pak

Useful Software  
\$ 25.00 Diskette  
for: C64

20 plus business programs for solving financial problems, mortgages, real estate analysis, present values, syndication, leases, etc.

## MicroCheck

MicroBits Peripherals  
\$ 49.95 ROM  
for: C64

Screen displays check recorder, checks, and deposit slips to look like a familiar paper checkbook. 30 accounts, transfers between accounts, continuous balances and scrolling through check recorder.

## Personal Net Worth

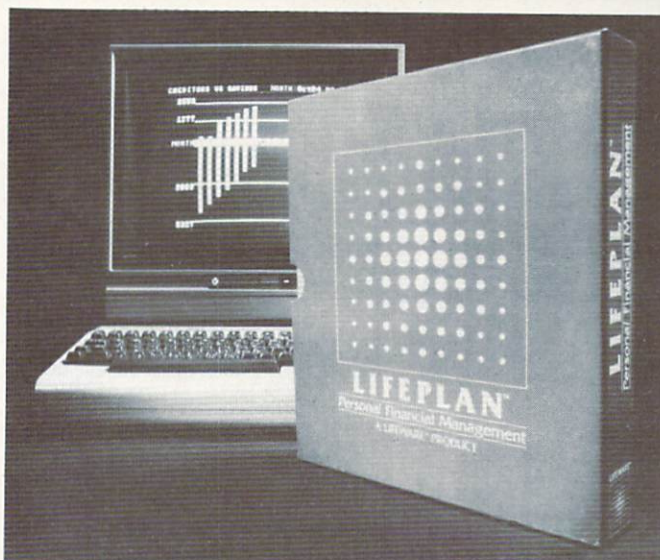
Scarborough Systems  
\$ 79.95 Diskette  
for: C64

Lets you manage, track and organize everything you need to know or do about your money matters.

## Real Estate Investor

Jance Assoc.  
\$ 35.00 Disk or Tape  
for: C64

Enables the prospective real estate buyer to analyze the financial and tax consequences of alternative real estate investments.



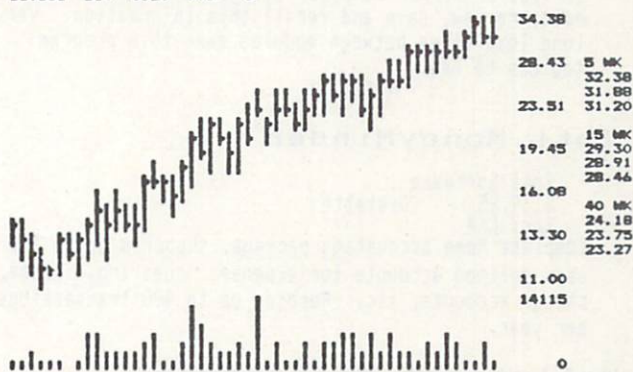
## LifePlan

LifeWare  
\$ 99.95 Diskette  
for: C64

An easy to use personal financial management system for home use. Designed to help middle class families and individuals improve their financial security. Includes credit management (to control or eliminate debts), expense management (budget plan), and Financial growth monitoring (via special screen displays and printouts), 5 different charts/graphs and 8 monthly reports.

>>>> Circle Reader Service No. 28 <<<<

SDM GOLDEN WEST FINANCIAL  
850531 DIV 0.20 P/E 8



## Stock Helper

(M)agreeable Software  
\$ 30.00 Diskette  
for: C64

A technical analysis program that displays weekly price and volume charts and calculates moving averages of prices. You may enter weekly data for up to 100 stocks and up to 20 market indicators. Keeps up to 52 weeks of data and drops the oldest week. You decide when to buy or sell.



## Smart

Double E Electronics  
\$ 49.95 Diskette  
for: C64

Covers word processing, money management, amortizations, recording keeping and time management.

## StockTrender

JB Horton  
\$ 75.00 Diskette  
for: C64

Stores 53 weekly prices per stock (data input by user). Stores values for 100 stocks per disk. Calculates mean FPC, annualized yield, variance, standard deviation and other statistics. Ranks best to worst stock in 6 categories.

## Swiftax

Timeworks  
\$ :na Diskette  
for: C64

An income tax preparation program that requires no prior knowledge of computers or accounting. Supports schedules a,b,c,d,g,w,se, and form 2441 - stores the totals and integrates this info into your form 1040, 1040a, or 1040ez.

## TAS-64

Abacus Software  
\$ 84.95 Diskette  
for: C64

Analyzes and charts technical indicators for the serious stock market investor. Automatically download your indicators from Dow Jones/News retrieval service or Warner Computer Systems or manually enter, edit, review, save and recall this information. Very long load times between modules make this program tedious to use.

(-Staff)

## Totl. MoneyMinder

Totl Software  
\$ 39.95 Diskette  
for: C64

Complete home accounting package, supports up to 110 user defined accounts for expenses, checking, income, charge accounts, etc. Records up to 400 transactions per year.

## Wallstreet Microscope

Wallstreet Corp.  
\$ 135.00 Diskette  
for: C64 C128

Investment software for analysis of common stocks. Complete with database of 1500 firms on disk. Updates available by subscription. Single or batch processing. Search capabilities, market averages, file creation and maintenance capabilities. Demo disk also available.

>>>> Circle Reader Service No. 45 <<<<

# SPREADSHEETS

INFO

What If? If that is the question, and it concerns columns and rows of numbers, then this is the answer.

## Vizastar's spreadsheet

Solid State  
\$ 119.97 Disk & ROM \*\*\*\*\*  
for: C64 C128

1000 x 64 cell spreadsheet with 10k RAM available (14k with the XL8 version for extra \$\$\$). Powerful spreadsheet commands, windows, DBMS, graphics, pie and bar charts, menu-driven and easy-to-use. Need we say more than it's the C64's answer to 1-2-3!

(-Staff) See review, Issue #7

## Calc Result Advanced

Handic Software  
\$ 99.95 Disk & ROM \*\*\*\*\*  
for: C64

A 3-dimensional spreadsheet that supports split screens, windows, color graphing, extensive help screens and complex formulas. Search and sort routines would make this powerful package exceptional.

(-B.D.) See review, Issue #1

## Practicalc

Computer Software Associates  
\$ 49.95 Disk or Tape \*\*\*\*\*  
for: C64

Easy to use spreadsheet. Searching and sorting functions add extra value here.

(-B.D.)

## Calc Result Easy

Handic Software  
\$ 49.95 ROM \*\*\*  
for: C64

A single page, scaled down version of calc result advanced (this is the same product Commodore markets as 'Easy Calc 64') with no windows or split screens.

(-B.D.)

## Cal kit

Batteries Included  
\$ :na Diskette  
for: C64

Spreadsheet with built-in templates for the most needed home and business applications, including income tax, budgets and more.

## E.L.F.

CodeWriter  
\$ 40.00 Diskette  
for: C64

Easy Language Form, an 8 page free/form spreadsheet that allows you to interact complex calculations directly with written text and ELF writes the BASIC code.

## Multiplan

HES  
\$ 99.95 Diskette  
for: C64

Microsoft's popular advanced spreadsheet package for the 64, at a fraction of it's original cost and with most of it's original power.



### Powerplan-64

Atacus Software  
\$ 49.95 Diskette  
for: C64

Powerful and flexible spreadsheet for the C64, with built-in graphics so you can display your data in graphs as well as numbers. Menu driven, with over 90 help screens to assist you, and a complete tutorial is included.

### PractiCalc 64

PractiCorp International  
\$ 29.95 Diskette  
for: C64

Full feature spreadsheet which includes 23 math functions and many spreadsheet options such as insert, delete, move and copy. 250 rows by 100 columns and is compatible with PractiFile's data files.

### Programmable Spreadsheet

PractiCorp International  
\$ 39.95 Diskette  
for: C64

Full feature spreadsheet which includes the ability that the user may program in BASIC for a convenient way for better input/output.

### SwiftCalc

Timeworks  
\$ :na Diskette  
for: C64

Powerful easy-to-use spreadsheet designed for home or small business use. Includes 'Sideways' which allows you to print your spreadsheets sideways on your printer. 250 row by 104 columns. Interfaces with Data Manager 2 and Word Writer.

### SynCalc

Synapse  
\$ :na Diskette  
for: C64

Electronic spreadsheet, templates are available seperately for predesigned use at home or office.

### Turbo Calc/64

Aquarian Software  
\$ 17.95 Diskette  
for: C64

Memory resident / 100% machine and p-code. Menu driven 13K RAM for data / 100 X 26 matrix / help screens / menu on screen at all times / full printer support / built-in functions.

## WORDPROCESSING

INFO

Wordprocessors help you make your ideas look as good on paper as they seemed when you first got them.

### Paperclip With Spellpack

Batteries Included  
\$ 99.95 Diskette \*\*\*\*\*  
for: C64

Same as paperclip but includes a spelling checker.  
(-B.D.)

### Paperclip

Batteries Included  
\$ 89.95 Diskette \*\*\*\*\*  
for: C64

With its many enhancements this has become our first 5-star wordprocessor. It can be used with 80-column hardware, has software 80-column mode, horizontal scrolling in 40 column mode, extensive search & replace variations. Our 'in-house' wordprocessor.  
(-B.D.)

### Spellpack

Batteries Included  
\$ 49.95 Diskette \*\*\*\*\*  
for: C64

Spelling checker for BI's Paperclip wordprocessor. Checks documents against a 20,000 word dictionary in under 4+ minutes. An additional 5,000 may be added.  
(-B.D.)

### Easy Script

Commodore  
\$ 49.95 Diskette \*\*\*\*\*  
for: C64

Quality at a low price. Range of capabilities similar to Wordpro 3 Plus. Features on-screen formatting and horizontal scrolling. (Originally developed by Precision Software).  
(-B.D.)

### Omniwriter With Omnispell

HES  
\$ 69.95 Diskette \*\*\*\*\*  
for: C64

On-screen formatting, interfaces with multiplan, and integral 30,000 word spelling checker highlight the many features of this wordprocessor.  
(-B.D.)

### Script 64

Richvale Telecommunications  
\$ 105.00 Diskette \*\*\*\*\*  
for: C64

Full-featured with search and replace, numerics, screen formatting and dictionary software built-in (you must build the vocabulary yourself). Built-in 80-column software. Now includes a database manager ('Scratch Pad').  
(-B.D.)

### Spellpro 64

Pro-Line  
\$ 49.95 Diskette \*\*\*\*\*  
for: C64

25,000 word dictionary (expandable) spelling checker for Pro-line's Wordpro 64.  
(-B.D.)

### Wordpro 3 Plus/64

Professional Software  
\$ 99.95 Diskette \*\*\*\*\*  
for: C64

Full-featured wordprocessor with Spellright Plus and widely supported by other vendors' products. Lacks on-screen formatting and multi-column capability. Spellright is an 18,000 word spelling checker with room for 1500 user entered words.  
(-B.D.)



## Wordpro 64

Pro-Line

\$ 49.95 Diskette

\*\*\*\*

for: C64

All the original Wordpro features plus: 100% proportional spacing, 40 to 136 column of screen display (you can't read them but you can see what your page will look like), multiple columns printed in one pass, and an 'oops' buffer for accidental deletions. Also interfaces with Pro-Line's 25,000 word spelling checker.

(-B.D.)

## Easy Spell

Commodore

\$ 29.95 Diskette

\*\*\*\*+

for: C64

20,000 word dictionary and spelling checker that works with Commodore's Easy Script.

(-B.D.)

## Cut & Paste

Electronic Arts

\$ 39.95 Diskette

\*\*\*

for: C64

Advertised as 'the remarkably simple word processor'. What Cut & Paste gains in simplicity, it loses in power and utility. No one likes unnecessary complexity, we don't need to be protected from search & replace, just show us how to use it better.

(-B.D.)

## Word Machine/Name Machine

Commodore

\$ 19.95 Diskette

\*\*\*

for: C64

You get a mini wordprocessor and menu-driven mailing list program suitable for light-weight letter writing and mailings. Also included are DOS 5.1 and a nice program that will add a 'smart' directory menu to any of your diskettes.

(-B.D.)

## Homeword

Sierra On-Line

\$ 49.95 Diskette

\*\*\*-

for: C64

Menu-driven wordprocessor features icon function selection and pictorial view of document layout. Includes audiotape-based tutorial and a 30 page manual. In spite of the thought and labor behind this product, this system is very slow and awkward.

(-B.D.)

## Bank Street Writer

Broderbund

\$ 49.95 Diskette

for: C64

Generally well-regarded wordprocessor especially suited to occasional users.

## Fleet System 2

Professional Software

\$ 79.95 Diskette

for: C64

Complete word processor with built-in 70,000 word spelling checker (15,000 customized words can be added). Built-in 80 column scrolling, math functions, search and replace, etc.

## Mirage Wordprocessor

Mirage Concepts

\$ 89.95 Diskette

for: C64

Full-featured wordprocessor that links with their database manager and now includes 30,000 word spelling checker. Integral 80-column software.

## Paperback Writer 64

Digital Solutions

\$ 39.95 Diskette

for: C64 C128

Word processor with visual on screen formatting like boldface, underline, and italics. C128 faster/80 column version is available for \$15 more.

## Spell Now

Cardco

\$ 39.95 Diskette

for: C64

Compatible with Cardco's Write Now word processor. Has a 34,000 word dictionary, and user definable dictionaries. Marks questioned words in text. View word in context and/or correct it. Menu driven.

## Super-Text Professional

Muse Software

\$ 79.95 Diskette

for: C64

For novices to experienced wordprocessor users. On screen help, 80 column screen (no hardware), autolink, math mode, split screen, copy/save/delete blocks of text, automatic word wrap, multiple file search and replace and more.

## Textomat-64

Abacus Software

\$ 39.95 Diskette

for: C64

Easy to use and powerful wordprocessor. Many features including form letters, chaining of documents, block operations and complete printer set-ups. Full 80 column lines with horizontal scrolling. Simple on screen commands.

## The Critic

Quantum Leap

\$ 16.00 Diskette

for: C64

Software 80 column mode, supports keyboard graphics, globals, word count, quick reference cards and a 15 page memory.

## Totl Speller 3.6

Totl Software

\$ 35.00 Diskette

for: C64

Checks spelling on Totl.text documents, provides a 10,000 word spelling checker (with room for 14,000 additional words).

## Word Writer

Timeworks

\$ :na Diskette

for: C64

An efficient 80-column professional word processor with built-in 40,000 word spelling checker and calculator. Interfaces with other Timeworks products.

## Write Now

Cardco

\$ 49.95 ROM

for: C64

Full-featured with global search & replace, Arabic or Roman page numbering, audiotape instructions along with the manual, up & down scrolling, links with 'Mail Now', saves to tape or disk.







### Flexfile 2.1

Cardinal Software  
\$ 59.95 Diskette  
for: C64

Powerful and easy to use program. Stores thousands of record items per file with 20 or more compacted fields of information per item. Rorder the file by any combination of subtotals, averages, running totals, etc. Calculated report column headings use +, -, \*, /, log and trig. Select records or reports or mail labels by field comparison, range, codes and multiple criteria.

### Home Integrator

CodeWriter  
\$ 24.99 Diskette  
for: C64

Four separate data entry programs covering checkbook, name & address book, recipe files, and home inventory. Completely menu driven.

### M'File

Double E Electronics  
\$ 49.95 Diskette  
for: C64

Data base with up to 36 fields per record, 250 characters per record, 1000 records per disk. Includes report generator that allows columnar or horizontal printing.

### Mailer

Raymond Reynolds  
\$ 19.95 Diskette  
for: C64

Stores and retrieves up to 800 records with name, address 1 and 2, city, state, zip and telephone numbers.

### MasterType Filer

Scarborough Systems  
\$ 39.95 Diskette  
for: C64

Home filer and list manager that uses color, sound and graphics to attract children.

### MicroFiler

MicroBits Peripherals  
\$ 24.95 ROM  
for: C64

Easy to use yet flexible file management software. Cartridge format allows for use of disk or tape storage. Full function search and sort features includes multi-field capabilities.

### PractiFile

PractiCorp International  
\$ 29.95 Diskette  
for: C64

Handles large filing tasks with ease. Allows reconstruction of files without re-entry of data. Includes mail label feature, report writer, and integrates with PractiCalc 64.

### Pro-Data

Nanosec  
\$ 49.95 Diskette  
for: C64

Free form screen entry design including graphic characters with cursor wrap-around. Change keyfile at any time (temporarily or permanently). 800 records, up to 80 characters per field, up to 80 fields per record. Reports and label capabilities.

### Salesman Expense

CodeWriter  
\$ 19.99 Diskette  
for: C64

Allows sales personnel to keep track of all expenses easily and accurately.

### Totl. InfoMaster

Totl Software  
\$ 49.95 Diskette  
for: C64

Full feature general database system which uses dynamic disk allocation to allow a single file to use the full capacity of the disk. Up to 2,500 characters/record and 100 fields of 200 characters.

### XPER-64

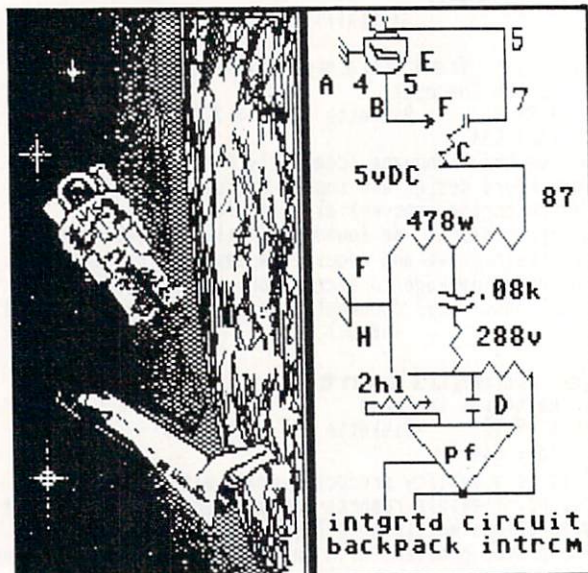
Abacus Software  
\$ 59.95 Diskette  
for: C64 C128

Database system for the C64 & C128, includes searching, full reporting and data maintenance capabilities.

## GRAPHICS

INFO

A picture is worth a thousand words, but graphics software costs about the same as wordprocessors.



### Flexidraw 5.0 with light pen

Inkwell  
\$ 149.95 Diskette \*\*\*\*\*  
for: C64

Comprehensive light-pen based drawing package (for use with Inkwell's professional grade pen), supports true hi-res (320x200) with elaborate area pattern fills, unlimited template creation, two printout sizes, sprite editor, animation routines, coloring mode, telecommunications mode for transmitting graphics, programming graphics language & more! Not a toy, but lots of fun!

(-B.D.) See review, Issue #2

>>>> Circle Reader Service No. 21 <<<<



## Print Shop

Broderbund  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

A must for every C64 owner with a suitable printer (supports many popular models), for printing greeting cards, signs, banners, letterheads and more. Includes excellent manual, graphics editor (Koala compatible), colored tractor paper and envelopes. Many different fonts and (editable) graphics characters. I can see the 'garage sale' signs now.

(-Staff) See review, Issue #6

33 FONTSTYLES AVAILABLE ON

\* FLEXIFONT \*

FANTASY	ROUND	DUNGEON
ART DECO	ITALICS	BUBBLE
SCRIPT	TYPE SET	SKETCH
COMPUTER		OUTLINE
GREEK		SAKI



CREATE FOREIGN CHARACTER SETS,  
SYMBOLS, PICTURES & PATTERNS.

## Flexifont

Inkwell  
\$ 29.95 Diskette \*\*\*\*\*  
for: C64

Light pen driven character generator with thirty-three accessible font (letter) styles, plus option to create users' own characters, foreign characters, symbols or patterns fills. Characters can be edited, moved, customized and saved. Requires Flexidraw & light pen.

## Doodle!

City Software  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

Routines include: paint & erase with 8 brush sizes, duplicate, enlarge, reduce, reverse & mirror. Menu-driven with color, various text sizes, orientations, zoom, marvelous 'op art' feature, built-in graphics dumps to printer in single or double size.

(-B.D.)

## Paint Magic

Datamost  
\$ 34.95 Diskette \*\*\*\*\*  
for: C64

This is a solid color graphics package with all the usual bells and whistles, plus some extras like: create hundreds of your own fill-textures, complex multi-colored brushes with 'grab' function, merge 2 pages of graphics together. Screen dumps are not directly supported.

(-B.D.)



## Banner Machine

Cardinal Software  
\$ 49.95 Diskette \*\*\*\*\*  
for: C64

Lets you make banners and signs on your printer. Setup program for most printers and interfaces on the market. Printer dumps are a level of magnitude faster than Print Shop. Manual is a bit obscure, additional fonts too costly, and program is not as flexible as it could be, but the end result is very nice, with choice of eight type sizes in four included font styles.

(-Staff)

## Graphics Magician Pict. Paint

Penguin Software  
\$ :na Diskette \*\*\*\*\*  
for: C64

Picture and object painter that lets you store many multi-color pictures on disk and recall them quickly. Pictures maybe added easily to your own programs. This package is very tedious to work with compared to most graphics packages, but the resulting screens can be pulled off disk fast enough to be used in commercial software.

(-B.D.)

## Print Shop Graphics Lib. I

Broderbund  
\$ 24.95 Diskette \*\*\*\*\*  
for: C64

120 graphics to be used as supplementary art with the (required) 'Print Shop'. Includes graphics for holidays, special occasions, sports, school, zodiacs, animals and more.

(-Staff)

## Print Shop Graphics Lib. II

Broderbund  
\$ 24.95 Diskette \*\*\*\*\*  
for: C64

120 graphics to be used as supplementary art with the (required) 'Print Shop'. Includes graphics for hobbies, occupations, people, places, travel and health.

(-Staff)



## Banner Printer

Raymond Reynolds  
\$ 14.95 Disk or Tape  
for: C64

Prints letters and characters in banner style on any Commodore printer and many others (does not use bit addressable graphics). Tape version for \$9.95.

## CadPic

KiwiSoft Programs/Ace Software  
\$ 79.95 Diskette  
for: C64

Computer aided design package for the C64. Similar to 'PaintPic' but includes print capability. Compatible with most dot-matrix printers including Epson JX-80 and Okimate 10 color printers.

## ColorMe Computer Coloring Kit

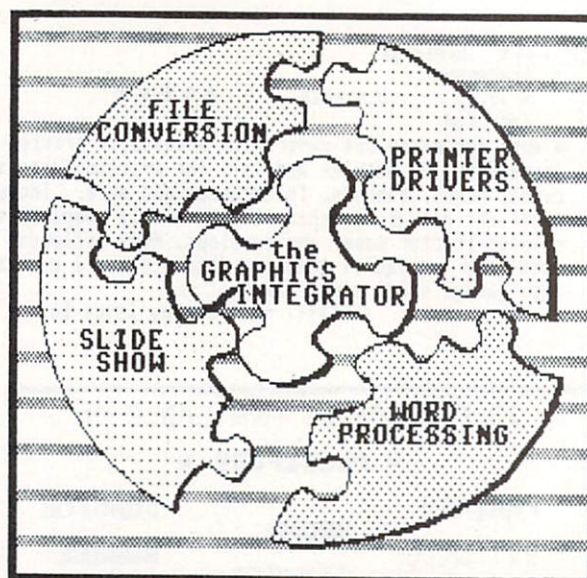
MindScape  
\$ 29.95 Diskette  
for: C64

Easy to use and designed especially for young children. They can draw freehand or use a drawing program to cut and paste pictures from picture disks (sold separately).

## Fantavision

Broderbund  
\$ :na Diskette  
for: C64

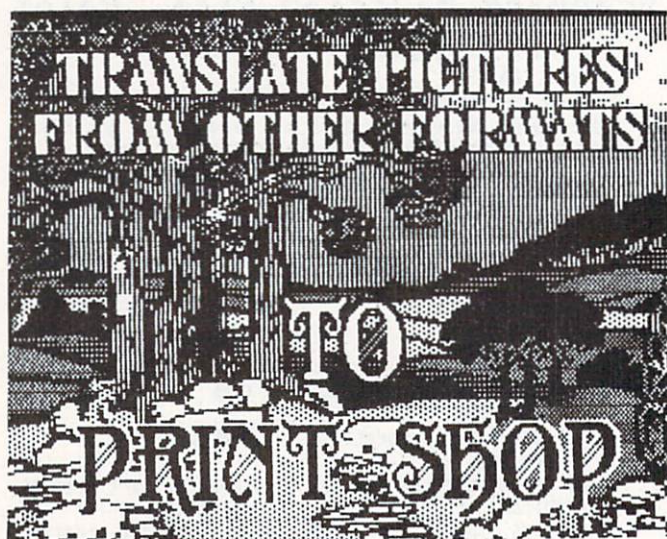
Another Broderbund landmark (originally designed for the Apple II, but soon to be available for the Commodore machines C64, C128 and Amiga), which lets you create simple full-screen animation in seconds, to create a movie-on-disk that you can send to your friends.



## Graphics Integrator

Inkwell  
\$ 29.95 Diskette  
for: C64

A compatibility 'bridge' between Flexidraw, other popular graphics packages, and word processing software which accept external files (ie file conversion from one graphics package to another, as well as integration of text and pictures). Creates self running 'slide shows' in hi-res and multicolor and more. Available August 1985.



## Graphic Conversion C64

Hi-Tech Graphics  
\$ 20.00 Diskette  
for: C64

Converts Koala pics to Doodle! pics or vice versa with minimal loss of resolution or color definition. Convert either color formats to shaded b/w format of 'the Print Shop' or convert PS's screen magic displays to either Doodle or Koala. Also works with Flying Colors, CADPAK-64, UltraBASIC-64, B/graph and HES graphic basic.



## PaintPic

KiwiSoft Programs/Ace Software  
\$ 39.95 Diskette  
for: C64

16 color drawing and painting package for the C64. Provides easy drawing with keyboard, joystick, graphics tablet, pen modes, and text mode, 65,000 different paintbrushes, automatic arcs, rectangles, ellipses, triangles, lines, parallelograms, automatic copy, mirror, rotate half and double.



## Graphic Conversion

M. Keryan  
\$ 20.00 Diskette  
for: C64

Lets you convert a graphic from one format to another (Koala, Doodle, Print Shop, Computereyes, etc.). Use it to add lettering to pictures, change colors, etc.

## Micro Illustrator

Commodore  
\$ 29.95 Diskette  
for: C64

Graphics program with joystick or light-pen input.

## Sprite Wiz

DJ Software  
\$ 19.95 Diskette  
for: C64

Sprite editor with 9 modes: multi-color, puzzle, page, etc.



## Colortone Keyboard -membrane

Waveform  
\$ 79.95 Diskette  
for: C64

The art-work makes this flat-membrane keyboard look 3-D but it really isn't. It has some interesting icon-based intermediate level software.  
(-B.D.)

## Colortone Keyboard -Pro

Waveform  
\$ 399.95 Diskette  
for: C64

This is a full-travel professional-feeling number with a touch sensitive membrane strip across the top (acts like a second keyboard for effects, etc.). You also get some special software geared more toward the performing professional.  
(-B.D.)

## Incredible Musical Keyboard

Sight & Sound  
\$ 29.95 Diskette  
for: C64

A nifty little keyboard assembly that sits snugly on your C64 keyboard (and looks like its part of it). The piano layout gives two octaves of keys that make musical sense. You don't get feel of a real keyboard but this a good compromise for the \$\$\$. It is compatible with Sight & Sounds entire line of music software (very considerable).  
(-B.D.)

## Melodian Keyboard

Melodian  
\$ 200.00 Diskette  
for: C64

With ConcertMaster is a strong suit (3 modules at \$39.95) from Melodian, but the \$200 keyboard is ridiculously priced, the feel is definitely dime-store (\$69.95 would have been more acceptable). The software is another story - its up there with the best.  
(-B.D.)

## Model 64 Sequencer

Sequential Circuits  
\$ 200.00 Diskette  
for: C64

This is the interface with software that allows the 64 to store, process & sequence music and sound tracks from MIDI devices (like their Six-Trak Synthesizer).  
(-B.D.)

## Music Mate Keyboard

Sequential Circuits  
\$ 99.00 Diskette  
for: C64

This 2 & 1/2 octave polyphonic keyboard could be the price/performance breakthrough we've been waiting for. Includes software for creating custom sounds and recording/playback of up to 10 minutes of continuous music. Plugs into the joystick port leaving others free.  
(-B.D.)

## Six-Trak Synthesizer

Sequential Circuits  
\$ 1100.00 Diskette  
for: C64

Midi-compatible, this keyboard is clearly aimed at the pro market. When used with a C64 and the Model 64 Sequencer it can be used to input 8 sequences of notes on up to six 'tracks'.  
(-B.D.)

## Virtuoso! Musical Keyboard

Synthware  
\$ 69.95  
for: C64

A professional style 4-octave keyboard with software.



## Allegro

Parabola  
\$ 39.95 Diskette  
for: C64

\*\*\*\*\*

Expert or novice, if you want to get serious about music & sound then you'll love it. Used by many commercial software houses to add music to their programs. New version turns keyboard into real-time synthesizer. Makes complex sounds you can't even get with most other music products for the C64. Excellent documentation includes clear discussions of music & digital sound.  
(-B.D.)



### Kawasaki Rhythm Rocker

Sight & Sound  
\$ 39.95 Diskette \*\*\*\*+  
for: C64

This will take you for a fast ride thru sights & sounds. Has alot of 'anyone can use it' appeal, along with some pretty 'nuts & bolts' user control features. Preprogrammed base tracks and lots of wild graphics controls. Probably the most fun of the lot. Works with Sight & Sounds keyboard overlay/attachment.

(-B.D.) See Gallery, Issue #4

### Master Composer

Access Software  
\$ 39.95 Diskette \*\*\*\*+  
for: C64

This is a real solid music-processor with 4 visible staves, color voice, designations, real time graphic display of notes as they play. Great sample tunes demonstrate the rich musical potential of Master Composer. Change sounds during play, link files for extended compositions and interrupt-driven with facilities for patching music to existing or new programs.

(-B.D.)

### Musicalc I

Waveform  
\$ 74.95 Diskette \*\*\*\*+  
for: C64

An elaborate, colorful, well-documented music system incorporating synthesizer and sequencer features in a visually dazzling environment. Graphic slider bars make it almost like sitting in music studio. But be prepared to spend some time studying when you sit down to write some music.

(-B.D.)

### When I'm 64

Alien Group  
\$ 29.95 Diskette \*\*\*\*+  
for: C64

Unusual in many ways (besides it's name) like: inexpensiveness, looks plain, easy going, supports exotics (glide, vibrato, real-time over-dubbing, single-key re-timing, interfacing with a singing speech synthesizer, programmable vocals and a synchronized face to mouth the words. One of my favorites for a quick romp into musical self-expression.

(-B.D.)

### Music Writer-64

M'Soft  
\$ 69.95 Diskette \*\*\*\*  
for: C64

Especially nice animated staff & scrolling notes (that looklike real notes) highlights this entry. Easy to find your way around the various menus, dumps sheet music to printer, full voice control, well documented, 12k of note storage, and help screens.

(-B.D.)

### Note Pro II

Electronic Lab Industries  
\$ 49.95 Disk or Tape \*\*\*\*+  
for: C64

A plain vanilla music writer with an ample set of creative tools, input & edit 8 measures of 3-part music on the lo-res graphics staff. One feature I like is the ability to transpose a score to another key without re-entering each note.

(-B.D.)

### Dancin' Feats

Softsync  
\$ 29.95 Disk or Tape \*\*\*\*+  
for: C64

This program makes up in accessibility what it lacks in depth. Completely menu-driven, you play along with some well-done background tracks from blues to rock to a waltz. What do you play on? Your joystick! The graphics display is tied to the music & is very dynamic. Fun & simple.

(-B.D.)

### Music Construction Set

Electronic Arts  
\$ 39.95 Diskette \*\*\*\*+  
for: C64

Less than the equivalent of Pinball Construction Set. Impressive programming behind it, fun to watch, play and listen to. It just falls short of what it could have been (only 2 voices and 13 pre-determined sounds). These and other problems stem from apple conversionitis.

(-B.D.)

### Studio 64

En-Tech  
\$ 39.95 Diskette \*\*\*\*+  
for: C64

Scrolling graphics, snappy menus & adjustment displays are really nice in this package. Tho the only way to get listenable music is to transcribe sheet music or be able to compose music in standard notation. Demo & features are well excuted, but unless you read &/or write music, you'll be frustrated by this music package.

(-B.D.)

### Synthy 64

Abacus Software  
\$ 27.95 Disk or Tape \*\*\*\*+  
for: C64

Fundamentally an extension to BASIC adding over a dozen new commands which can be used in BASIC program statements to construct and play music at run-time. Alter ADSR and other controls like glide. Not really state-of-the-art but beats poking into memory.

(-B.D.)

### Ultisynth

Quicksilver  
\$ :na Diskette \*\*\*  
for: C64

This program proves that you can have lots of talent and skill and still make a mess of things. The problem is that it is overwhelmed by its own features, resulting hopeless encumbrances like the 4-page condensed reference card set. Honestly, even the author must not enjoy trying to compose on his/her system (as evident by the single unremarkable demo on the disk).

(-B.D.)

### 64 Sounds

JAL Software  
\$ 22.95 Diskette  
for: C64

15 programs in BASIC that cover digital sound synthesis using the SID chip. Includes single/multi voice and filtered sound effects, utilities, and



examples.

#### A.U.D.I.O. disk 2

Parabola  
\$ 8.95 Diskette  
for: C64

Helpful hints, new presets, more music & surprises.

#### Allegro Sampler

Parabola  
\$ 8.95 Diskette  
for: C64

Over an hour of the best music by Allegro users.

#### Bank Street Music Writer

MindScape  
\$ 39.95 Diskette  
for: C64

For users of any level of music knowledge. Two musical staves on screen and the ability to shape tones and includes repeats, endings, and triplets.

#### Cantus, The Music Improviser

Algo-Rhythm Software  
\$ 49.95 Diskette  
for: C64

Allows beginners as well as music connoisseurs to use a sophisticated musical device. Full screen editor allows control of tempo, rhythm, harmony, counterpoint, etc. Over 50 ready to run modifiable sample files provided, including 'hoedown-1' and 47 page manual.

>>>> Circle Reader Service No. 9 <<<<

#### Guitar Pak

JAL Software  
\$ 29.95 Diskette  
for: C64

Menu based integrated musicians utilities including 2 guitar/instrument tuners, metronome, drum machine, external audio processing tremolo filter and on-disk manual. Audio cassette demo also available for \$5.

#### Music Shop

Broderbund  
\$ 44.95 Diskette  
for: C64

Lets users work, edit, play and print original compositions all in one program. Has full musical capabilities, automatic page-turn (no scrolling here), gives user full control of the SID chip, and more.

#### Music Writer 64

Double E Electronics  
\$ 29.95 Diskette  
for: C64

Three complete voices, easy note entry, realtime control of wave, 4.5 octave range, printing capabilities and more.

#### Songwriter

Scarborough Systems  
\$ 39.95 Diskette  
for: C64

Turns your computer into a 'word processor for music'.

#### Texture

Cherry Lane Technologies  
\$ :na Diskette  
for: AMIGA

A modular recording program that allows flexible editing and easy manipulation of musical text. Musical compositions can be recorded as a series of small pieces then linked together to form a complete composition.

#### Virtuoso! 1.1

Synthware  
\$ 24.95 Diskette  
for: C64

A complete music package for the 64 that allows you to create sounds, compose, and play compositions. Menu-driven, resides entirely in RAM. Holds 24 presets in memory. Write compositions up to 900 notes for each of 3 voices. Special multi-computer feature allows two or more 64's to be connected and play multi-part music in synchronization.

#### Virtuoso! BASIC interface

Synthware  
\$ 15.95 Diskette  
for: C64

Adds six new commands to BASIC. Allows playing back of Virtuoso! compositions in the background of a BASIC program.

### TELECOMPUTING (SOFTWARE)



Use your computer to  
talk to the world.  
(Keep an eye on the  
meter, tho: global  
contact ain't cheap!)

#### VIP Terminal

Softlaw  
\$ 59.95 Diskette \*\*\*\*+  
for: C64

May be the only terminal program you need. Includes: CBM-Punter & non-CBM protocols, 40, 64, 80 or 106 columns (no extra hardware needed), built-in text editor, auto-dial & redial, 15 entry phone directory and excellent documentation.

(-Staff) See review, Issue #6

#### Compuserve 64 Executive

CompuServe  
\$ 49.95 Diskette \*\*\*\*  
for: C64

The business version of CompuServe's 'Vidtex' is a full featured smart terminal package. Tho optimized for CompuServe's own parameters, they can be easily changed. A 32k save buffer, dump to printer, function key definitions, auto-log on and more.

(-B.D.) See review, Issue #6

#### Smart 64 Terminal +3

Microtechnic Solutions  
\$ 49.95 Diskette \*\*\*  
for: C64

User-defined parameters (baud, parity, etc.) compiled basic, one-key log-on, up & down loading, 28k save buffer, and specially designed to optimize access to Compuserve and Commodore's Compuserve database. Now supports the 1650 automodem.

(-B.D.) See review, Issue #6



### Kterm -version 2

Kattwinkel computing  
\$ 14.95 Diskette \*\*\*+  
for: C64

30k save buffer, listable basic, audible key-click, keep/discard keys, one key log-on, up and down loading capabilities.

(-B.D.)

### Compuserve 64 Vidtex

CompuServe  
\$ 39.95 Diskette \*\*\*  
for: C64

Compuserve's own terminal program, which lacks many snappy features and doesn't have CBM-Punter protocols but it's far and away the best way to access CompuServe. Documentation is weak, built-in text editor and a 32k buffer.

(-B.D.) See review, Issue #6

### CP/M Term

Cardinal Software  
\$ :na Diskette  
for: C64 CP/M

CP/M telecommunications program that supports the C64 (with CP/M adapter program) with 1600, 1650, and HES modems at 300 baud. Also supports any RS232 modem (with adapter) at 1200 baud.

### FirstTerm

Public Domain  
\$ :na Diskette  
for: C64

Access both non-CBM and CBM-Punter protocols, all CompuServe files including '.IMG' and does conversions. Full screen editing and 33k buffer. 40-column display and separate documentation file (you can print-out yourself). It's not fancy but it's free from most users groups.

(-Staff) See review, Issue #6

### HomeTerm (from within HomePak)

Batteries Included  
\$ 49.95 Diskette  
for: C64

HomePak is three programs on one disk (terminal, word processing & database). HomeTerm does not download from a CBM-Punter host and will not deal with CompuServe's .IMG files, although it will handle the others. Tiny 12k buffer, but the documentation is the best.

(-Staff) See review, Issue #6

### Jordan NAPLPS Videotex

Addison Information Systems  
\$ :na Diskette  
for: C64

Lets you access NAPLPS and ASCII videotex services via modem at 300 or 1200 bauds. A variety of services support the software. Available free of charge from a service such as Viewtron in southern Florida or direct from Addison for a \$5 ship/handling charge.

### Modem Master

Aquarian Software  
\$ 29.95 Diskette  
for: C64

Bulletin Board system works with both 300/1200 baud. Punter file xfer protocol / menu driven / over 25 commands / public message base / 250 user capacity / clock-calendar / printer output / e-mail check at sign-on / user survey-poll / old e-mail deleted after 1 wk. / private e-mail base.

### Omniterm Terminal

Aquarian Software  
\$ 19.95 Diskette  
for: C64

Terminal software supports 1660 modem. Punter protocol 300/1200 baud. 10 programmable function keys / 15-no. phone directory / 20K receive buffer / tone or pulse dialing / auto-dial, redial.

### Q-Term

Peripherals System of America  
\$ 29.95 Diskette  
for: C64

Full feature terminal program, supports popular modems like Mighty-Mo, HES, Westridge, and Hayes. Menu driven.

### Super Term

Midwest Micro  
\$ 89.95 Diskette  
for: C64

For hobby and professional use. It creates only true-ASCII sequential file (only an 18k buffer), an extensive built-in text editor, supports several protocols including CBM and non-CBM. Comprehensive documentation.

(-Staff) See review, Issue #6

### Telemessage BBS

Tailored Solutions  
\$ 79.50 Diskette  
for: C64

Professional BBS including 5 support programs and manual. Designed for 'crash-proof' operation. Completely automatic including clock and updated calendar. Program can be modified by user and is not copy protected.

### War Games Autodialer

MegaSoft  
\$ 29.95 Diskette  
for: C64

Automatically dials a set of numbers, then reviews, saves or prints the numbers answered by a computer.



**PERSONAL  
ENRICHMENT**

Electronic aid for  
what ails you. The  
computer equivalent  
of "How To..." books.

### Aerobics

Spinnaker  
\$ 44.95 Diskette \*\*\*  
for: C64

Leads you through warm-ups, stretches, aerobics and cool-down. Three levels (beginner, intermediate & advanced) of intensity, a well illustrated manual and most of all an impressive upbeat musical score to motivate you. Lengthy disk access problem can be overcome by extending current routine until another is loaded.

(-Staff) See review, Issue #6



### The WORD Processor

le Research Systems  
\$ 199.95 Diskette \*\*\*  
for: C64

Not just a word-processor, but 'the word' of God processor. This package consists of a sophisticated search & display program and the entire King James text on 8 disks. Producing an index by keyword is the real power of this package. Written in BASIC and is amazingly quick in completing searches. Recommended for the serious Bible student.

(-M.B.) See review, Issue #6

### The Surf

JAL Software  
\$ 19.95 Diskette \*  
for: C64

Hard to categorize this type of software. Creates a crude seaside picture with an animated ripple of surf. If that's not enough for you, an annoying white noise hisses in the background (s'posed to sound like waves rolling in). You can achieve a better effect (for free) by taping an old postcard to your tv set and turning up the volume on an unused channel. I hope you have better uses for your C64 !!

(-B.D.)

### Bartender's Friend

Raymond Reynolds  
\$ 14.95 Diskette  
for: C64

Contains a treasury of liquor terms and recipes using almost 40k of memory.

### Bowler

Raymond Reynolds  
\$ 39.95 Diskette  
for: C64

File tracking and maintenance system for a league secretary. Up to 100 bowlers and 22 teams.

### Chord Power

NewArts  
\$ 39.95 Diskette  
for: C64

Enter one of 8,000 guitar cords and it will be played and displayed on the screen. Displays 12 frets of the guitar.

### Dinner's On!

Briley Software  
\$ 9.95 Tape  
for: C64

Menu planner from favorite meals for up to 15 days in advance. Sorted shopping list. Uses DATA statements.

### Easy Guitar

DJ Software  
\$ 29.95 Diskette  
for: C64

Menu driven guitar lesson program with many features. Internal instructions and documentation.

### Evelyn Wood Dynamic Reader

Timeworks  
\$ :na Diskette  
for: C64

Use your computer to improve your reading comprehension retention, and speed.

### Grocery Mart

Briley Software  
\$ 9.95 Tape  
for: C64

Maps out one grocery store by aisle and speed. Calculates tax, cost and coupons in advance. Uses DATA statements.

### Keys to Typing

Batteries Included  
\$ :na Diskette  
for: C64

Easy to follow typing tutorial program.

### Lottery 64

Superior Micro Systems  
\$ 24.95 Diskette  
for: C64

Designed to help you (with the aid of your C64) play the various lottery games (pick3, pick4, lotto, super lotto, 6/49, lucky lottery, etc.).

### Micro Astrologer

Commodore  
\$ 19.95 Diskette  
for: C64

Shows you how your birthdate effects your personality, career, love life and more.

### Micro Cookbook

Commodore  
\$ 34.95 Diskette  
for: C64

Two disk program with over 150 recipes. Printout recipes or a grocery shopping list for selected recipes. Each recipe can be adjusted for the number of servings.

### Model Diet

SoftSync  
\$ 29.95 Diskette  
for: C64 C128

Modifying the government RDA's to reflect your personal lifestyle, Model Diet instantly calculates your vitamin intake, analyzes your unique nutritional requirements and programs a safe diet schedule. Extensive food library which breaks down nutritional values and compare your intake with the RDA. Weekly summary tracks your nutritional intake.

### Nutritionist

Nanosec  
\$ 34.95 Diskette  
for: C64

Calculate or suggest a diet or a specified workout. Choose from a list of over 200 common foods to meet your proper requirements including vitamins and minerals.

### Original Computer Diet

Scarborough Systems  
\$ 49.95 Diskette  
for: C64 C128

The original Boston computer diet computer counselor, for easy-to-use day-by-day personal fitness and weight loss counselor. Analyzes your nutritional requirements, monitors your eating habits and suggests meal plans. Designed for persons who have weight-loss problems of 10 to 40 pounds.



## People

Bible Research Systems  
\$ 49.95 Diskette  
for: C64

Topical cross reference to over 140 personalities in the Bible. Must have 'The WORD Processor' from Bible Research Systems to use this.

## Piano & Violin Tutor

Melcher Software  
\$ 19.95 Diskette  
for: C64

Two separate programs for \$19.95 each or \$34.95 for both. They enhance note reading ability and sound identification. Colorful graphics, simulating sound and documentation included.

## Recipes Supreme

Melcher Software  
\$ 29.95 Diskette  
for: C64

Comes with 40 superb recipes on the disk and allows you to store your own for convenient access. Ideal for the home or the home economics class.

## Squire

Blue Chip  
\$ :na Diskette  
for: C64

Simulation that lets you experiment with income and expenses to derive a financial plan for you that will let you retire as a millionaire within 20 years. Emphasizes value of money, inflation and interest bearing investments and tax advantages.

## Topics

Bible Research Systems  
\$ 49.95 Diskette  
for: C64

Topical cross reference to over 200 subjects in the Bible. Must have 'The WORD Processor' from Bible Research Systems to use this.



## MAE (Macro Assembler Editor)

Eastern House  
\$ 39.95 Diskette \*\*\*\*+  
for: C64

Complete 6502 development system, widely used in the software industry.  
(-M.B.)

## PAL 64

Pro-Line  
\$ 49.95 Diskette \*\*\*\*  
for: C64

Supports free-format entry of code with comments, conditional assembly, and many other assembler options. Relocatable and takes up only 4K of memory. Outshines all other assemblers with the ability to write BASIC programs with machine language routines.  
(-M.B.) See review, Issue #7

## Power 64

Pro-Line  
\$ 49.95 Diskette \*\*\*\*  
for: C64

A BASIC programmer's dream utility package in 4k to 8k of memory, depending on how much power you want. Adds dozens of commands like: merge, search and replace, renumber, etc. Our only complaint is that the renumber utility doesn't properly tag invalid GOTOs and GOSUBs (it rennumbers valid ones fine, though).  
(-M.B.) See review, Issue #6

## Sysres

Solidus International  
\$ 95.00 Diskette \*\*\*\*  
for: C64

Absolutely loaded with features: fast-scrolling, re-define keys, auto & re-number, true merges, find-change with wild-cards, space and rem removal and 3 trace modes to name a few. May not be suitable for the casual user due to the complexity (tho we know several who use only a few commands and feel they get their moneys worth).  
(-B.D.)

## Toolbox 64

Pro-Line  
\$ 89.95 Diskette \*\*\*\*  
for: C64

Pro-line's package that includes both PAL 64 and Power 64 programs.  
(-M.B.) See review, Issue #7

## Assembler Monitor-64

Abacus Software  
\$ 39.95 Diskette  
for: C64

For developing machine language programs for your C64. Assembler has fast macro assembler capabilities, supports conditional assembly, full screen editing of source program, assembles to memory and symbol table listing. Includes hunt, disassemble code, transfer blocks of data, and more.

## BASIC-64 Compiler

Abacus Software  
\$ 39.95 Diskette  
for: C64

Complete compiler for speeding up your BASIC programs. Includes free run-time module so you can develop programs for commercial resale with no royalty payments. Allows you to compile speedcode, machine lang., or a combination of both.

## I.E.A. (instant edtr/assmblr)

Aquarian Software  
\$ 17.95 Diskette  
for: C64

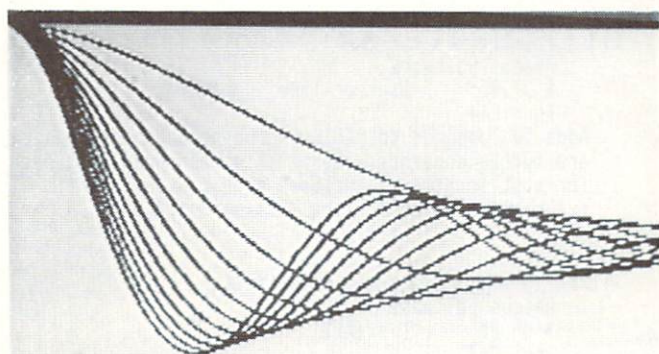
Machine Lang. editor/assembler / assembles 17K of source code in 5 seconds. Co-resident editor assembler monitor. Works with HES-Mon. Slow-motion code analyzer. Technical assistance phone number. Recommended by Jim Butterfield, Jim Gracely, etc.

## Instant Editor Assembler

Robin's Software  
\$ 5.00 Diskette  
for: C64

Contains an excellent editor/assembler system, full featured monitor and a walk program with variable step speeds and the ability to add break points. All three programs may be resident in memory at the same time.





## MASS SPRING DAMPER SIMULATION

M

### Interactive Simulation Lang.

Interactive Mini Systems  
\$ 100.00 Diskette  
for: C64

Solve differential equations with ease, allows you the power to model, conduct graphical experiments, evaluate strategies, and more at assembly speed. Applications for sociological models, electronic circuits, biological, chemical nuclear processes, fluid dynamics and more. Contains editor, compiler, reverse assembler, graphics and run time executive. 48 page tutorial.

### Pro-Assembler

Nanosec  
\$ 88.00 Diskette  
for: C64

Supports 6502, 65C02, 6510, Z80, 8086, 8088, 68000 and Z8000. 3 passes, supports conditional assembly, base 16, 10, 8 & 2, and leaves all available basic RAM free.

### Pro-Compiler

Nanosec  
\$ 99.00 Diskette  
for: C64 C128

Full 32 bit arithmetic compiler, includes BASIC programs or subroutines or assembler code or already composed programs during computation. Full Commodore V.2 basic set implemented. Available soon for the C128.

### PTD-6510 Symbolic Debugger

Pterodactyl Software  
\$ 49.95 Diskette  
for: C64

Advanced debugger: step, breakpoints, windowing. Super complex conditional breaks, patch, show prior 128 steps, compiled BASIC-like machine language.

### SpeedWriter

CodeWriter  
\$ 50.00 Diskette  
for: C64

Speeds up your BASIC program to run faster and more efficiently. Simple just give it the name of your BASIC program and it will do the rest.

1)EXIT 2)EDIT 3)ASSEM 4)DECODE 5)DEBUG  
6)LOAD 7)SAVE 8)CLEAR 9)CONTIG 0)DISK

THE MACHINE SHOP  
V1.0

(C) 1985  
FS! SOFTWARE  
PO BOX 7896  
MPLS MN 55487

### The Machine Shop

FS! Software  
\$ 39.95 Diskette  
for: C64

A complete, integrated machine lang. development system. It combines a full-screen editor with a macro assembler, symbolic disassembler & debugger, crossreferencer and a C64 assembly language book. Unprotected and source code is available separately. Includes a free one year subscription to 'Machine Code', the machine language programmers journal.

)))) Circle Reader Service No. 41 <<<<

### VS64COBOL

Visionary Software  
\$ 49.95 Diskette  
for: C64

Combination editor, compiler, interpreter, and symbolic debugger for COBOL on the C64. Designed along the ANSI X3.23-1974 standards. Includes 100 page manual and sample program to facilitate learning how to use the system.

)))) Circle Reader Service No. 44 <<<<

### XREF-64

Abacus Software  
\$ 17.95 Diskette  
for: C64

A BASIC programmer's tool that indexes the usage of all variables, line numbers, numeric constants and BASIC keywords. It tells you which line uses a given variable name or which line numbers use a given BASIC command. Cross reference can be listed to screen or printer.

### COMAL 2.01

Comal Users Group  
\$ 99.95 ROM  
for: C64

\*\*\*\*\*

COMAL 2.01 spoils you, this cartridge version leaves you with over 30K to use and overcomes the shortcomings of COMAL 0.14 (which is very good itself). Commands like viewport, window and stamp ease graphic programming. The sound capabilities surpass some of the dedicated music software. Cartridge with 2 books and 2 demo disks is also available for \$128.90.

(-M.B.) See review, Issue #6



# PROGRAMMING LANGUAGES



Parlez vous Pascal?  
Spreken ze COMAL?  
Hablo de FORTH?  
Do you speak BASIC?  
INPUT BINARY? AFFIRM:

## LOGO

Commodore  
\$ 49.95 Diskette \*\*\*\*\*  
for: C64

A no-contest best buy and probably the finest piece of software to bear the Commodore label to date.  
(-B.D.) See review, Issue #3

## C64-Forth/79

Performance Micro Products  
\$ 69.95 Diskette \*\*\*\*\*  
for: C64

A Forth/79 development environment including 2D graphics extension (including line, circle, scaling, window and hi-res characters), screen editor, macro assembler with debugger and 167 page manual. Also includes 'Save TurnKey' for royalty free application program distribution.

(-B.D.) See review, Issue #3

>>>> Circle Reader Service No. 8 <<<<

## KMMM Pascal

CGRS Microtech  
\$ 85.00 Diskette \*\*\*\*\*  
for: C64

True compiler that generates machine code from Pascal source. Editor compiler, translator included. The translation program is excellent, providing a run-time package that is compact and fast (3 to 4 times faster than Oxford with our test program). The compiler is quick and efficient, unfortunately it does not support the full standard Pascal (the manual lists these deviations).

(-M.B.) See review, Issue #5

## COMAL 0.14 Starter Kit w/book

Comal Users Group  
\$ 29.95 Diskette \*\*\*\*\*  
for: C64

COMAL's graphics are the best available anywhere...there are over 50 graphics commands. One complaint is that this disk-loaded version leaves you with only 10K of free memory, but you can't beat it, when it's free (from most users groups -which is perfectly legal). The book is well organized and very clear.

(-M.B.) See review, Issue #4

## Oxford Pascal

Limbic Systems  
\$ 39.95 Disk or Tape \*\*\*\*\*  
for: C64

5 to 2 times faster than BASIC (but not quite as fast as KMMM Pascal), supports graphics and sound, ability to chain programs for complex tasks, however the 'string' type is truly missed.

(-M.B.) See review, Issue #5

## Ultrabasic-64

Abacus Software  
\$ 27.95 Disk or Tape \*\*\*\*\*  
for: C64

Adds 50 commands to BASIC including graphics, music, and turtle commands. Built-in screen-dump routines for most printers. Includes manual with 2-part tutorial and demo. (Tape version - \$24.95)  
(-B.D.)

## ADA Training Course

Abacus Software  
\$ 59.95 Diskette  
for: C64

Supports a subset of this high level language for teaching syntax, and features modular program construction, error checking at compile and run time, easy operation with program library, simple linking to machine language programs. Includes editor, compiler, assembler and disassembler.

## C Power

Pro-Line  
\$ :na Diskette  
for: C64

A C language compiler package for the C64. Works with 1 or 2 drives (including MSDs). Package includes disk and SAMS 'C Primere Plus' book. A full K&R C minus bit fields.

## COMAL 19 Disk Set

Comal Users Group  
\$ 94.95 Diskette  
for: C64

First 19 COMAL disks, for COMAL 0.14.

## COMAL C64 Sampler

Comal Users Group  
\$ 19.95 Diskette  
for: C64

Original C64 COMAL disk, includes sample graphics, music, games, utilities and more.

## COMAL extras

Comal Users Group  
\$ :na  
for: C64

COMAL demo disks, keyboard overlays, tutorials, utility disks, user group disks, books, and cartirdges all at various prices (discounted to COMAL Today subscribers).

## COMAL Intro Special

Comal Users Group  
\$ 7.00 Diskette  
for: C64

Economical way to get started with COMAL, includes: tutorial disk and auto-run disk.

## COMAL Startup Special

Comal Users Group  
\$ 11.00 Diskette  
for: C64

Adds 'COMAL from A to Z' reference manual to the Intro Special.

## COMAL, Best of

Comal Users Group  
\$ 19.95 Diskette  
for: C64

Double sided disk featuring some of the best COMAL 0.14 programs of 1984.



## Forth Language

Abacus Software  
\$ 39.95 Diskette  
for: C64

Allows you to write programs that are more compact and efficient than BASIC yet easier to use than Assembly language. Built-in vocabulary which supports graphics, sound, the ability to create your own new words, also includes full screen editor, Forth assembler and handbook.

## Green Pilot

Greenwood Software  
\$ 20.00 Diskette  
for: C64

A version of standard PILOT, that has been enhanced for easier use. Includes 'help' command.

## Kyan Pascal, Advanced

Kyan Software  
\$ 69.95 Diskette  
for: C64

The expanded version of 'Standard Kyan Pascal' with advanced features and capabilities for the professional Pascal programmer. Includes standard version plus: machine code compiler, string handling, dispose, assign, chain, enhanced graphics and more.

>>>> Circle Reader Service No. 26 <<<<

## Kyan Pascal, Standard

Kyan Software  
\$ 49.95 Diskette  
for: C64

Designed with the beginner in mind, with command menus, help screens, compiler error messages and tutorial manual. Memory resident, full screen text editor, file management system, stand-alone runtime environment, graphic extensions and full pass error detection.

>>>> Circle Reader Service No. 27 <<<<

## M&M Forth

M&M Software  
\$ 27.95 Diskette  
for: C64

Disk based Forth language system. Includes screen editor, 6502 assembler, 80 page manual, and more.

## Master-64

Abacus Software  
\$ 39.95 Diskette  
for: C64

Application development package with powerful commands for screen management, superior indexed file management, multiprecision math, machine language monitor and more. Adds 100 commands to BASIC and creates royalty free programs.

## Pascal-64

Abacus Software  
\$ 39.95 Diskette  
for: C64

A structured language compiler of the well known standard Pascal, but enhanced to take advantage of the C64's special features. Supports sequential and relative files, procedures and functions, sprites, hi-res and multi-color graphics.

## PDI Comal Starter Pak

Public Domain  
\$ 35.00 Diskette  
for: C64

A 4 disk collection consisting of Comal 0.14, demo's, games, and program aids.

## Pilot II

Easyware  
\$ 20.00 Diskette  
for: C64

A pilot language interpreter with full high resolution turtle graphics and full sprite support, including a sprite editor built into the language. Registered versions with telephone support are available for \$40.



## PROMAL

Systems Management Associates  
\$ 49.95 Diskette  
for: C64

Programming system including compiler, full screen editor and an operating system 'executive'. Similar to C and Pascal, but interactive. Executes faster than other high level languages and has MS-DOS-like commands. Includes 240 page manual, demo disk, money-back guarantee. Unprotected. Developers version (\$50 extra) lets you run PROMAL applications without system disk.

## Super C Language

Abacus Software  
\$ 79.95 Diskette  
for: C64

Includes editor, compiler, linker and handbook. The editor lets you create source programs (up to 41k) containing 80 character lines and features horizontal scrolling, and compiles it to 6502 machine code. Linker lets you combine up to 7 modules for later execution.

## Watcom Pascal

Watcom Products  
\$ 149.00 Disk & ROM  
for: C64

Features bit mapped graphics capabilities, procedures

## Waterloo Structured Basic

Watcom Products  
\$ 99.00 ROM  
for: C64

Features structured statements, procedures, auto-line numbering, delete lines, and renumber.





### SuperForth 64 + A.I.

Parsec Research  
\$ 99.00 Diskette  
for: C64 C128

Artificial intelligence expert system package for the C64 & C128 for writing 5th generation software. Gives you many additions and enhancements to standard FORTH. Create stand alone intelligent programs license free. A 496 page manual and two disks included. System compatible with cameras and i/o control cards. Also compatible with Fischertechnik Robotics Lab.

>>>> Circle Reader Service No. 39 <<<<

### Video Basic-64

Abacus Software  
\$ 39.95 Diskette  
for: C64

Adds dozens of powerful commands to BASIC that let you create graphics and accompanying music or sound effects. Create royalty free software. Hardcopy printouts are possible with most dot matrix printers. for accessing sprites, SID chip, and any other i/o device.

## COPY SYSTEMS

**Tho it's still not clear who can make how many of which & for what, these will surely help you do it!**

### Fasthack'em

Basement Boys Software  
\$ 29.95 Diskette \*\*\*\*\*-  
for: C64

Disk copier for MSD II, 1 or 2 1541s. Backup disks in under 3 minutes with one 1541, less than 60 seconds with MSD or 2 1541s. Programs drives for stand-alone operation; unplug them and they run along copying disks by themselves while you use your C64 for something else! New version includes 1541 nibbler to break the most stubborn protection. Our in-house disk copier.  
(-M.B.)

### Mr. Nibble

Full Circle Software  
\$ 49.95 Diskette \*\*\*\*\*+  
for: C64

Full disk (35-38 track) copier is completely automatic (only swap disks), and takes less than 8 minutes. One of the best copiers currently available. Includes file copy program, fast formatter, and cute stickers.  
(-M.B.) See review, Issue #7

### Ultrabyte

Ultrabyte  
\$ 39.95 Diskette \*\*\*\*\*+  
for: C64

Copies tracks 35-38, completely automatic; just swap and go. Takes less than 8 minutes. One of the best copiers currently available. Now includes one free backup copy.

(-M.B.) See review, Issue #7

### Copy-G

Radix Marketing  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

Fast copies and works with single, two-singles, or dual drives. Generates graphic display of track and sector activity while processing. Cracks most all copy-protection schemes. Can also recover damaged data and files.

(-B.D.)

### Isepic

Star Point  
\$ 64.95 Disk & ROM \*\*\*\*\*  
for: C64

Revolutionary new concept in archival and software de-protection for the C64. A hardware and software package that allows you to make unprotected copies (with fastloaders if you are saving it to a 1541 disk) of all RAM resident programs. Cracked programs may then be copied onto other drive formats (i.e. SFD1001, MSD, 4040, 8050, etc.).

(-Staff)

### New Revised Clone Machine

Micro-W  
\$ 49.95 Diskette \*\*\*\*\*-  
for: C64

Now backs up non-standard sectors, reproduces density-frequency alterations, syncs to particular reference sectors and reformats single tracks. A MSD version is also available.

(-B.D.)

### Di-Sector

Star Point  
\$ 39.95 Diskette \*\*\*  
for: C64

Fully automatic, view and alter sector headers, remove errors from tracks/sectors, write programs inside your 1541. Useful utilities included. Needs to be updated to handle newer protection schemes.

(-M.B.) See review, Issue #7

### Ditto

Cardinal Software  
\$ 39.95 Diskette \*\*\*  
for: C64

Copies all but the latest copy protection schemes. Supports 1 or 2 1541 disk drives. Menu driven, easy to use, takes approximately 25 minutes and even backs itself up. Well supported by Cardinal Software.

(-M.B.) See review, Issue #7



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(-Staff)

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(-B.D.)

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Fully automatic, view and alter sector headers, remove errors from tracks/sectors, write programs inside your 1541. Useful utilities included. Needs to be updated to handle newer protection schemes.

(-M.B.) See review, Issue #7

### Ditto

Cardinal Software  
\$ 39.95 Diskette \*\*\*  
for: C64

Copies all but the latest copy protection schemes. Supports 1 or 2 1541 disk drives. Menu driven, easy to use, takes approximately 25 minutes and even backs itself up. Well supported by Cardinal Software.  
(-M.B.) See review, Issue #7



## Canada A/M

Skylight Software  
\$ 39.99 Diskette  
for: C64

\*\*\*-

This is an easy to use back up system that will break much of the copy-protection (up to about late 1984). Informative on-screen readouts, users simply swaps disks when prompted (on-screen and audio-signal) and Canada A/M does the rest. Can take up to 20 minutes to make a copy.

(-B.D.) See review, Issue #7

## Apollo

Computron Business Systems  
\$ 29.95 Diskette  
for: C64

Latest generation single-drive copy program copies all errors, bad tracks and sectors, non-standard formats, bad syncs, and half tracks. Replaces Megasoft's Gemini copier.

## Capture

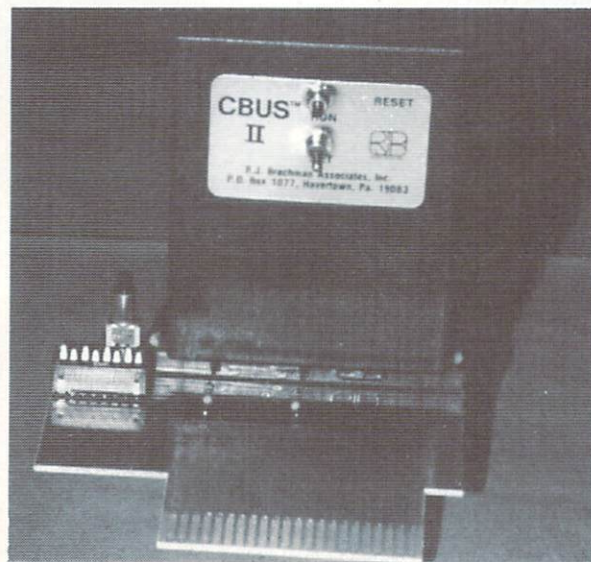
Jason-Ranheim  
\$ 39.95 ROM  
for: C64

C-64 copier similar to Star Point's 'Isepic'. For additional \$\$\$ you can get various eeproms.

## Cartridge Backer

CSM Software  
\$ 54.95 Diskette  
for: C64

Allows you to make disk based archival copies of 99% of the cartridges (and many disk programs) on the market. Create your own autoboots and copy files to or from disk or tape. No external ram boards, roms or cartridges required. Includes manual, expansion board with re-set switch, and program disk.



## CBUS

R.J. Brachman Associates  
\$ 99.95 Diskette  
for: C64

Cartridge Back-up System for the C64, that lets you copy any standard cartridge to disk. The CBUS II cartridge emulator lets you 'play back' any standard cartridge image from disk. A diskette is included with the system which contains all necessary programs. The entire process is fully automated and takes under 2 minutes for a given cartridge.

## Copy II 64

Central Point  
\$ 39.95 Diskette  
for: C64

Copies nearly all protected software (under 3.5 minutes) for archival backups. Recreates all errors, half tracks, non-standard sectors, changed data rates, duplicate sectors and many special track formats. Works with printer and other devices plugged in, maximum 4 swaps, and NOT copy protected itself.

## Disk Maker 3.3

Basix  
\$ 49.95 Diskette  
for: C64

Fully automatic, copies G.C.R. code protection / no-sync data blocks / includes long data-block logic / copies up to track 40 / 3 copiers; fast copier, vari-sector copier, & auto-logic nibbler. Full disk copied in 2.75 min. Uses 'Masterkey module' which contains up-datable routines. Indus GT version available. Product support phone # and future module updates.

## Disk Master

Quantum Leap  
\$ 6.00 Diskette  
for: C64

Two programs on disk, one is a copy program and the other is a utility to view, edit, and printout data from disk.

## MSD Sure Copy

MegaSoft  
\$ 39.95 Diskette  
for: C64

Copies protected & unprotected disks on MSD drives. Includes several additional disk utilities.

## Omniclone

CSM Software  
\$ 35.00 Diskette  
for: C64

Three minute copy program, unprotected and fully documented. Copies 99% of all C64 software. Programmer's source code is included on the disk and is fully commented. Learn about high speed data transfer, m.l. programming and more.

## PSA/A.B.C.

Peripherals System of America  
\$ 29.95 Diskette  
for: C64

Archival Backup Copy, is a high speed disk backup program that backups protected disks. Works with 1 or 2 1541s.

## Quickcopy V 2.0

Abacus Software  
\$ 19.95 Diskette  
for: C64

Copy an entire disk in 2.5 minutes using two drives or 3.5 minutes using a single drive. No hardware modification is needed, reliable, and copies all file types.

## Shadow

MegaSoft  
\$ 89.95 Diskette  
for: C64

Software / hardware combination. 'It will even copy the other copy programs' Claims to copy 100% of all software for the C64.



## The Mirror

Computed  
\$ 24.95 Diskette  
for: C64

Automatically makes back-ups using nibbling, half tracks, extra sectors and tracks, reproduces all disk errors, even copies itself.

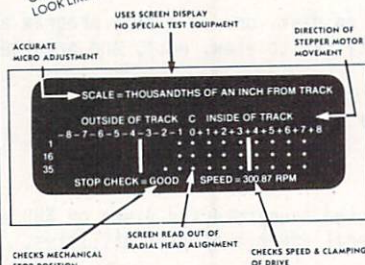
## UTILITIES



Covers just about everything else you can do with data and diskettes besides copy them.

## 1541 PHYSICAL EXAM

IS YOUR 1541 HEALTHY?  
OR WOULD ITS PHYSICAL EXAM  
LOOK LIKE THIS ONE?



Package includes:  
• True digital alignment disk with offset tracks  
• Quiet Drive stops to reduce need for continued realignment on old style drives.

## 1541 Physical Exam

Cardinal Software  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

Tests the speed of the 1541 and checks for misalignment. Includes complete instructions to perform the alignment and adjust the speed, 2 replacement stops (to use in place of the standard rigid stop) which cushion the read/write head from being knocked out of alignment again.

(-M.B.)

## Fast Load

Epyx  
\$ 39.95 ROM \*\*\*\*\*  
for: C64

Cartridge based disk speed-up program with a 3 to 5 fold increase in speed (loading only.) Includes utilities like machine language monitor, copier (for non-protected disks) and a dos wedge for simpler disk commands.

(-B.D.) See review, Issue #7

## Mach 5

Access Software  
\$ 34.95 ROM \*\*\*\*\*  
for: C64

Like Epyx's 'Fast Load' with additional commands like 'hardcopy' and 'disable drive rattle'. A disk is also included with 2 programs: Disk Organizer and BASIC Plus 4K which frees up an additional 4K of BASIC memory.

(-B.D.)

## PEEK A BYTE - COPYRIGHT 1984 SLAYMAKER

DISPLAY  
A - HEX/Char  
Z - ASCII/Screen  
X - Reverse/Norm

PARAMETERS  
T - Track  
S - Sector  
B - Buffer  
ctrl D - Drive  
ctrl U - Unit

R/S quits command  
Q quits program

Quantum Software  
Serial # 000000

FUNCTIONS  
ctrl B - BAM  
C - Convert  
D - Disassem  
E - Edit  
F - Fill  
ctrl M - Fill0/FF  
G - Goto  
J - Jump  
M - Monitor  
ctrl M - Memdrive  
ctrl P - Printer  
ctrl S - Search  
ctrl U - Un-new  
ctrl V - Verify1  
ctrl W - Verify2  
shft \$ - Directry

Command Mode Press Any Key

More HELP Press H

Restart PEEK A BYTE SYS 49152

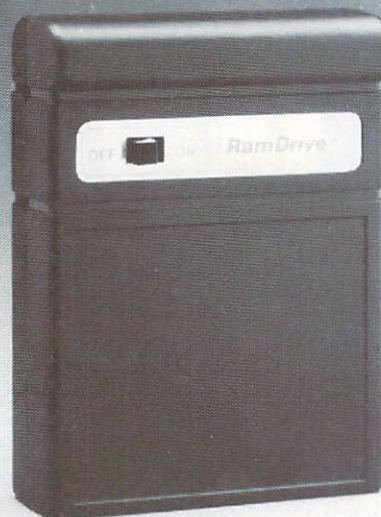
## Peek A Byte 64 V2.0

Quantum Software  
\$ 35.00 Diskette \*\*\*\*\*  
for: C64

With 'Disk Mechanic V2.0'. Excellent track and block editor for the C64 & 1541. It is memory-resident and compatible with the DOS wedge and machine code monitor. Read and modify header information, data under errors, directory information. Displays in hex, ASCII, screen codes, and will disassemble M/L programs. The best programmers utility since the monitor; an indispensable tool for the serious programmer.

(-M.B.)

Circle Reader Service No. 31 <<<<



## RamDrive 28

T.I.E. Limited  
\$ 34.95 ROM \*\*\*\*\*-  
for: C64

Memory manager and utility software cartridge. Partitions RAM under ROM to be used as 28K RAMdisk. Provides 45 BASIC, program management, and DOS commands to simplify operation and use of the C64. A very useful place for programmers to keep often-used utility programs; access is FAST. Great for program development, but unfortunately incompatible with most commercial software.

(-M.B.)

Circle Reader Service No. 34 <<<<



## 64 Doctor

PractiCorp International  
\$ 19.95 Disk or Tape \*\*\*-  
for: C64

Simple diagnostic programs for the C64 that can verify your own good hunches about what's not working. Tests drive, keyboard, video, audio, printer, joystick, RS-232 port and RAM. Cute, overpriced, you can live without it.

(-B.D.)

## Mr. Tester

Micro-W  
\$ :na Diskette \*\*\*-  
for: C64

Tests certain basic aspects of your computer and common peripherals: cassette drive, disk drive, printer, joystick or monitor. It won't tell you if some weird serial bus problem is hanging up your system, but it will tell your disk drive speed, sticky keyboard, etc.

(-M.B.) See review, Issue #6

## 1541 Alignment Program V2.0

CSM Software  
\$ 44.95 Diskette  
for: C64

A two disk program and calibration package that allows anyone with average mechanical skills to properly align the 1541 disk drive in a half hour or so. Check and adjust your drives rotational speed, track centering and track 1 position, to correct specifications. No special equipment needed and includes a specially prepared digital calibration disk.

>>>> Circle Reader Service No. 2 <<<<

## ApSoft-64

FS! Software  
\$ 39.95 Diskette  
for: C64

An extension to Commodore BASIC which adds Applesoft commands to the usual BASIC commands. Programs originally written for the Apple in Applesoft BASIC may be run under ApSoft-64 once they are put on a Commodore-format disk. Includes hi-res graphics, split screens, music synthesis and sprites. Also, a speedy loader, data base manager, check book balancer, and more.

>>>> Circle Reader Service No. 5 <<<<

## Auto64Directory

George Earl  
\$ 29.95 Diskette  
for: C64

Backups, screen color changes, run a program, saves, deletes and formats.

## B/Graph

Batteries Included  
\$ :na Diskette  
for: C64

Professional quality graphics, charting and statistical package.

## C-64 Utility City

Value Plus Software  
\$ 19.95 Diskette  
for: C64

Contains 8 of the most used utilities: cataloger, file copier, fast whole disk copier, etc.

## Cadpak-64

Abacus Software  
\$ 49.95 Diskette  
for: C64

Tool for computer aided design and drawing. Using a lightpen, you draw directly on the screen to create, edit pictures, drawings, layouts, etc. quickly, accurately and artistically. Menu driven and includes rotation and zoom capabilities. Hard copy with most dot matrix printers.

## Cataloger

Aquarian Software  
\$ 24.95 Diskette  
for: C64

Finds any program quickly / tells which disk program is on / gives name, id, side of disk, and category of program / protection errors used / date program was entered / block count / and comments. Sort and print list by any of 12 fields.

## Chartpak-64

Abacus Software  
\$ 39.95 Diskette  
for: C64

Make professional quality charts without any programming. You can enter, edit, save and recall your data. Then you interactively build pie, bar, line or scatter graphs. Includes statistical routines for average, standard deviation, least squares and forecasting. Works with most printers.

## Chartplot-64

Abacus Software  
\$ 84.95 Diskette  
for: C64

Like a sister to Abacus's 'Chartpak-64', but you can also record the final results onto plotters. You can also use data from spreadsheets such as 'MultiPlan', 'CalcResult' or 'BusiCalc'. You control the chart building from the keyboard. Pie, bar and line charts.

## D-compiler

MegaSoft  
\$ 59.95 Diskette  
for: C64

'de-compiler' gives you back your source code after you have compiled it with Blitz (Skyles Electric Works)

## Dialog

CodeWriter  
\$ 50.00 Diskette  
for: C64

Create all the interactive programs you can imagine without programming. Simple on screen process which allows you to create programs to educate, inform or just entertain.

## Disk Exerciser

Genesis Software  
\$ 29.95 Diskette  
for: C64

Disk diagnostic program enabling disk drive testing, read, write, scan, seek, disk speed plus full disk editor.

## Disk Library

Genesis Software  
\$ 19.95 Diskette  
for: C64

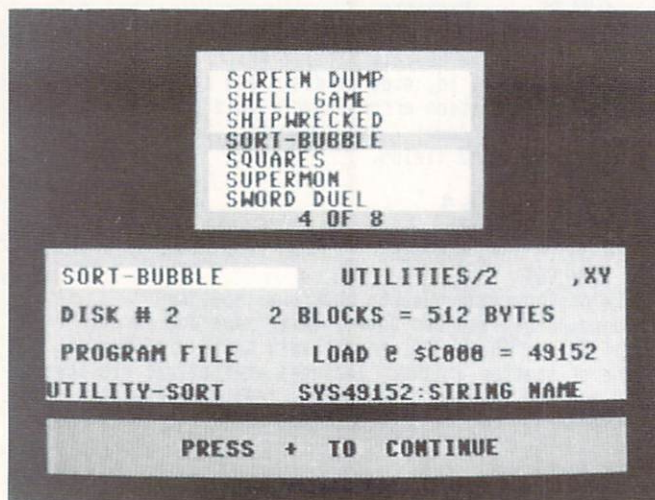
A database for disk users. Add, update, search, print disk labels, and print reports.



## Disk Organizer

Cardinal Software  
\$ 24.95 Diskette  
for: C64

Utility disk with programs for: backup, disk copy, directory sort, backup marker (marks programs which have been backed up), directory print and library maintains disk directories and allows them to be printed.



## Disk Sleuth

Nth Digit Solutions  
\$ 24.95 Diskette  
for: C64

Catalogs the contents of up to 100 disks into an alphabetized master directory disk. Each program entry contains full program information, including up to 40 characters of personal comments. Directory can be viewed, printed or searched. Allows key files to group programs by type.

## Disk-Lock V2.1

Aquarian Software  
\$ 39.95 Diskette  
for: C64

Copy protection scheme for users. Claims to stop over 90% of all copy programs. Multiple protection schemes. Puts protection on any track from 1 to 40. Menu-driven.

## EZ-DOS

Genesis Software  
\$ 19.95 Diskette  
for: C64

A menu driven DOS program supporting all DOS commands plus lock/unlock files, unscratch, change disk name, and print disk directory.

## Masterdisk v2.0

Integrated-Software System  
\$ :na Diskette  
for: C64

Fully integrated, automatic disk cataloging system with disk repair utilities. Dual drive version (for 4040, MSD, etc.) available soon.



## Hard Copy

FS! Software  
\$ 29.95 Diskette  
for: C64

Screen dump utility that waits until a special three-key press occurs then translates the screen colors into grey scale patterns on a dot matrix printer. With the Epson JX-80 true color pictures may be obtained. A special graphics-artist mode allows for color separations. Configures to individual printers.

>>>> Circle Reader Service No. 24 <<<<

## MenuWriter

CodeWriter  
\$ 40.00 Diskette  
for: C64

Links programs together so the user can select the program he needs by pressing one key. Menus can call other menus or programs, you control the whole process (screen color, layout and key choice).

## Operating System

Hacker's Hardware  
\$ 54.95 ROM  
for: C64

Reconfigures the C64 to operate under RAM Control rather than ROM. Supports all Kernal versions. Formerly sacred areas of the computer are now available to the novice or hacker alike.

## ReportWriter

CodeWriter  
\$ 40.00 Diskette  
for: C64

Lets you make your data into information that can be reorganized and presented to help you make decisions. You create a report which can be simple columns of figures, a memo, a check, a label, or whatever.

## Screen Dump

Cardinal Software  
\$ 19.95 Diskette  
for: C64

Dumps the characters on the C64 screen (with the exception of sprites) with the touch of two keys. Compatible with virtually all available software. Machine language.



## Slik Load

Megasoft  
\$ 29.95 ROM  
for: C64

Cartridge fast-loader with utilities. Claims 5 X speed improvement for loading. Eliminates drive rattle. Status key gives device number, bytes free, and drive status.

## Smart Start

Muse Software  
\$ 39.95 Diskette  
for: C64

Adds a more 'user-friendly' front end to Commodore BASIC. Cartridge allows you to load, run, and save programs at the touch of one key. Create sprites and sound effects and have the BASIC code automatically generated.

## StarDOS

Star Point  
\$ 74.95  
for: C64

ROM replacement which speeds up disk access and writing, eliminates head-knock, DOS wedge, built-in 3 minute copier, and more.

## SuperSprinter Deluxe

Nufekop  
\$ 49.95 Diskette  
for: C64

Package of programs designed for the above average C64 user. Includes Koala pad driven sprite editor, editor for designing scrolling screens, and many disk related programs.

## Symbol Master

Schneider Systems  
\$ 49.95 Diskette  
for: C64

Symbolic disassembler for converting 6502, 6510, 8502, etc. machine lang. programs into highly readable source code. The use of labels, coded as to usage, on each line referenced by another instruction allows one to see the overall structure and flow of a program. Outputs source code files compatible with each of 6 different assemblers for editing and re-assembly.

## Tool Box

MegaSoft  
\$ 19.95 Diskette  
for: C64

Over 100 routines for the C64 including: protection, smooth scrolling, modem routines, and sound & color. Routines may be incorporated into your programs.

## Top Secret Stuff

MegaSoft  
\$ 19.95 Diskette  
for: C64

A collection of some 15 or so unusual disk drive utilities for the 1541. Includes error makers and readers, 1/2 track schemes, 10-sec. format, 3-min. copy view bam, id check, and sync maker/reader routines (to name a few.)

(-Staff)

## Ultra-Wedge

D&A Enterprises  
\$ 14.99 ROM  
for: C64

Disk wedge program on cartridge (with re-set switch).

## ARCADE AND ACTION GAMES



BIFF!! BAMM!! BOFF!!  
ZOWIE!!...Shoot up  
the bad guys, save  
the universe, and  
rack up top score!!

## Blue Max

Synapse Software  
\$ 34.95 Disk or Tape \*\*\*\*\*  
for: C64

Strafing and Bombing actually made fun. Very detailed animation, graphics and sound. Blue Max is like a World War I version of 'Zaxxon', with angled scrolling and realistic shadow under planes. Readouts for fuel, damage, wind, landing gear, etc.

(-B.D.) See Gallery, Issue #3

## Centipede

Atarisoft  
\$ 44.95 ROM \*\*\*\*\*  
for: C64

Once again, a completely convincing adaptation of the classic with all the nuances of the original.

(-B.D.)

## Dig-Dug

Atarisoft  
\$ 44.95 ROM \*\*\*\*\*  
for: C64

One of our all-time favorite arcade games that is faithfully recreated for the C64. All the detail of the original: screens, patterns, animation and pleasing game-play. A nice extra is the ability to start at any screen and proceed from there. Hours of fun guaranteed.

(-B.D.) See Gallery, Issue #3

## Donkey Kong

Atarisoft  
\$ 44.95 ROM \*\*\*\*\*  
for: C64

The original Nintendo arcade game brought to Commodore by Atari. If you need this game described then you must have been off the planet the last few years. The C64 version even outshines the atari version.

(-B.D.) See Gallery, Issue #2

## Night Mission Pinball

Sublogic  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

An award winning pinball simulation with ten levels of play. Also features an editor for customizing the game.

(-B.D.)

## Pit Stop II

Epyx  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

This is not only the best car-racing game make for the C64, but easily one of the top 10 arcade games of all time for the 64! The dual-screen is incredible with each driver seeing the same world from his own position. Every detail is included, from changing tires & fuel to steering response. The smooth animation is 1st rate. For 1 or 2 drivers.

(-B.D.) See Gallery, Issue #6



### Q\*Bert

Parker Brothers  
\$ 44.95 ROM  
for: C64

\*\*\*\*\*

An absolutely faithful rendition of the coin-op favorite. The C64 version surpasses all the others. Superb animation, sound, graphics and game-play.  
(-B.D.) See Gallery, Issue #2

### Wizard

Progressive Peripherals  
\$ 29.95 Diskette  
for: C64

\*\*\*\*\*

This sensational 50-screen sizzler is sure to delight any fan of the 'jumpman-genre'. Goes further than just ropes and ladders with brilliant animation, visual humor, creative spells and professional sound effects. Best of all is the full-blown construction set mode, allowing user control over all graphics and game-play parameters.

(-B.D.) See Gallery, Issue #5

### Zaxxon

Synapse Software  
\$ 39.95 Diskette  
for: C64

\*\*\*\*\*

This 3-D effect video game with angled scrolling and shadowing is a real winner. Need we say more?  
(-B.D.) See Gallery, Issue #5

### Archon II: Adept

Electronic Arts  
\$ 39.95 Diskette  
for: C64

\*\*\*\*\*+

Played on a board where icons occupy the squares, and in an arena where icons race around trying to zap each other, the object of Archon II is to occupy all six power points (they move around, increasing the difficulty). For 1 or 2 players.

(-B.D.) See Gallery, Issue #7

### Archon

Electronic Arts  
\$ 39.95 Diskette  
for: C64

\*\*\*\*\*+

Played on a board where icons occupy the squares, and in an arena where icons race around trying to zap each other, the object of Archon is to occupy all six power points (they move around, increasing the difficulty). For 1 or 2 players.

(-B.D.) See Gallery, Issue #7

### David's Midnight Magic

Broderbund  
\$ 34.95 Diskette  
for: C64

\*\*\*\*\*+

Convincing physics makes this pinball simulation stand out, but the sound effects could have been much better.

(-B.D.) See Gallery, Issue #1

### Impossible Mission

Epyx  
\$ 34.95 Diskette  
for: C64

\*\*\*\*\*+

Life like movements of high resolution graphics like the hero running down hallways and somersaulting over enemy robots. Neither is this an anti-climax or a one-dimensional game. At its heart IM uses the classic video game structure of multiple rooms with catwalks, tokens and lots of enemies and adds puzzles, graphics, sound and speech synthesis.

(-B.D.) See Gallery, Issue #5

### Jumpman

Epyx  
\$ 39.95 Diskette  
for: C64

\*\*\*\*\*+

One of the all time greats, you can play this rope & ladders game for weeks without getting bored.  
(-B.D.) See Gallery, Issue #1

### Raid Over Moscow

Access Software  
\$ 39.95 Diskette  
for: C64

\*\*\*\*\*+

An engrossing multi-screen challenge, requiring skills similar to those needed in 'Beach Head' and then some. ROM also allows you to relax through the demo mode until the later screens appear and moving your joystick activates game mode and you can then practice.

(-B.D.) See Gallery, Issue #5

### Spy vs. Spy

First Star  
\$ 29.95 Diskette  
for: C64

\*\*\*\*\*+

True to the MAD magazine comic strip, these well known spy guys bounce back from repeated slayings and set backs. Fortunes change in favor of one spy and then the other. Two players can play simultaneously or the computer will play one.

(-B.D.) See Gallery, Issue #5

### Wizard Construction Set

Progressive Peripherals  
\$ 29.95 Diskette  
for: C64

\*\*\*\*\*+

New sequel to Wizard with another 40 screens and an improved construction set. Requires original Wizard.

### Ant Attack

QuickSilva  
\$ :na Diskette  
for: C64

\*\*\*\*

Striking similar to 'Realm of Impossibility' in many ways, tho by different authors. Animated stick-figures go scurrying around a 3-D city trying to rescue buddies from large ants who happen to eat animated stick-figures. Large scrolling world offers plenty of variation. A first-class 'fight & flee' game for one player.

(-B.D.) See Gallery, Issue #6

### Beach-Head

Access Software  
\$ 34.95 Diskette  
for: C64

\*\*\*\*

First-rate naval battle simulation with multiple screens. Smooth 3-D machine language, arcade-quality animation and sound. War may be hell, but Beach-Head is fun.

(-B.D.) See Gallery, Issue #2

### Bugaboo

QuickSilva  
\$ 29.95 Disk or Tape  
for: C64

\*\*\*\*

This gets high marks for originality. Whimsical fantasy game in which you are a cute little flea trying to avoid a flea-eating pterodactyl.

(-B.D.) See Gallery, Issue #3



### Castles of Dr. Creep

Broderbund  
\$ :na Diskette \*\*\*\*  
for: C64

If you are worried about 'video mind-rot', but no one at your house will touch anything but arcade games, then throw this one at 'em. A challenging mental puzzle requiring memory and visualization skills of considerable proportion to solve. Good sound and graphics.

(-B.D.) See Gallery, Issue #6

### Championship Lode Runner

Broderbund  
\$ 34.95 Diskette \*\*\*\*  
for: C64

50 complex screens, each more intricate and difficult than any in the original L.R., this requires concentration and ingenuity to complete, no screen building in this one. FOR LODE RUNNER EXPERTS ONLY!

(-B.D.)

### Frogger -by Parker Bros.

Parker Brothers  
\$ 39.95 ROM \*\*\*\*  
for: C64

Again, a very good translation of a the very popular arcade game.

(-B.D.)

### Frogger -by Sierra

Sierra On-Line  
\$ 34.95 Diskette \*\*\*\*  
for: C64

The official version of the popular arcade game by SEGA comes to the C64 with every nuance intact except the coin-slot and the aroma of pizza. Impressive music and sound, smooth animation. You can't get closer to the original than this.

(-B.D.) See Gallery, Issue #1

### G.I. Joe

Epyx  
\$ :na Diskette \*\*\*\*  
for: C64

This game is quite decent with several phases including hero/opponent choices, missions selection, and combat. While the hand-to-hand combat sequences are a bit goofy, the equipment combat is better than either 'Blue Max' or 'Bungeling Bay'.

(-B.D.) See Gallery, Issue #7

### Gumball

Broderbund  
\$ 34.95 Disk or ROM \*\*\*\*  
for: C64

Direct gumballs along a network of pipes by opening and closing gates in an effort to sort the gumballs into bins. Meet your quota before the 5 o'clock whistle blows. The highest scores are recorded on disk for posterity. Work your way up to more colors and faster production. Addicting.

(-B.D.) See Gallery, Issue #6

### Karateka

Broderbund  
\$ 29.95 Diskette \*\*\*\*  
for: C64

You are trained in karate and you must save your beloved princess Mariko from the evil warlord. To do so you must defend yourself against a series of palace guards and make your way through the palace. Excellent graphics and animation.

(-B.D.)

### Lode Runner

Broderbund  
\$ 34.95 Diskette \*\*\*\*  
for: C64

A tiny 'Gumbi' like figure, the lode runner races along catwalks and climbs ladders collecting bungeling booty and escaping the guards. Lode Runner carries a laser to shoot through the floor making a trap for the guards or an escape route for yourself. Edit mode enables creation of screens.

(-B.D.) See Gallery, Issue #5

### Pac-Man

Atarisoft  
\$ 44.95 ROM \*\*\*\*  
for: C64

It's the real thing! What else can we say?

(-B.D.)

### Perplexian Challenger

Progressive Peripherals  
\$ 15.95 Disk or Tape \*\*\*\*  
for: C64

The best 'flying thru space, looking thru the viewscreen' game we've seen. This nifty rendition has lots of little goodies, especially the cunning sound effects! Even the 'game over' sequence is a gem.

(-B.D.) See Gallery, Issue #3

### Pogo Joe

Screenplay  
\$ 39.95 Diskette \*\*\*\*  
for: C64

A 3-D fully animated, multiple-screen game of the 'Q\*Bert' persuasion. If you can finish the 10th screen and correctly report the word that appears, you get to enter Screenplay's drawing for \$10,000! Even if you don't get the cash, you'll have lots of fun.

(-B.D.) See Gallery, Issue #3

### Raid on Bungeling Bay

Broderbund  
\$ 29.95 Diskette \*\*\*\*  
for: C64

The enemy territory covers 100 screens' area. Each of six island factories keeps building the war machine until it is destroyed. You carry 9 bombs and your guns never run out of ammo. If tanks and anti-aircraft guns don't destroy you, fighter planes with heat seeking missiles just might.

(-B.D.) See Gallery, Issue #5

### Realm of Impossibility

Electronic Arts  
\$ 39.95 Diskette \*\*\*\*  
for: C64

Deluxe edition of zombies. Has simultaneous two player action (& without each other you're dead meat), 13 dungeons and 129 rooms. Frantic action with poor character/background relationship. Also has an eye opening 'warp-speed' scrolling between screens.

(-B.D.) See Gallery, Issue #6

### Robotron:2084

Atarisoft  
\$ 44.95 ROM \*\*\*\*  
for: C64

If you liked it in the arcades, you'll be happy with this Atarisoft's conversion of the Williams game for the C64.

(-B.D.) See Gallery, Issue #2



## Spelunker

Broderbund  
\$ 29.95 Diskette \*\*\*\*  
for: C64

Jump over chasms, climb from rope to rope, battle ghosts and bats, and navigate underground streams in this maze-style action game with a strategic element. Licensed from MicroGraphicImage who released it for Atari in 1983.

(-B.D.)

## Worms

Electronic Arts  
\$ 34.95 Diskette \*\*\*\*  
for: C64

A unique game win which players (up to 4) program their colorful, musical worms to take over and dominate the game grid. The C64 will play the parts of any missing players.

(-B.D.) See Gallery, Issue #3

## Blogger

Net Software  
\$ :na Diskette \*\*\*\*-  
for: C64

Developed in England, this jumpman style game stars a burglar type who must deal with moving floors, poisonous bushes, holes in the floor and watch-robots among other things while collecting keys and other necessities of the trade. 30 rooms / 5 skill levels.

(-B.D.)

## Star Wars

Parker Brothers  
\$ 44.95 Diskette \*\*\*\*-  
for: C64

Intruding into your spaceship's rectangular view screen are four laser cannons, which don't move but fire at a movable sight. Targets include other spaceships and gas clouds. Joystick up/down action is reversed (pulling back results in downward movement, etc.).

(-B.D.) See Gallery, Issue #5

## Trolls & Tribulations

Creative Software  
\$ :na Diskette \*\*\*\*-  
for: C64

Watch your step as you skulk around in what appears to be the sewer system of some ancient city: your troll must dodge the under-city denizens who patrol this hazardous but treasure-littered maze. 7 levels and 200 chambers.

(-B.D.) See Gallery, Issue #7

## Axis Assassin

Electronic Arts  
\$ 34.95 Diskette \*\*\*\*+  
for: C64

Survive the web-spinning 'master-arachnid' and rescue extra men from its nest.

(-B.D.)

## Defender

Atarisoft  
\$ 44.95 ROM \*\*\*\*+  
for: C64

A classic in the arcades (I'm glad that Atari spent some of my quarters on the R&D to bring this out on cartridge for the C64!). The controls lack the original's responsiveness and leaves the Earth in much greater danger!

(-B.D.)

## Flip & Flop

First Star  
\$ 39.95 Diskette \*\*\*\*+  
for: C64

Inventive animated game that has you hopping all over the place, then just when you've got the hang of things, you're suddenly upside down, climbing and hanging around.

(-B.D.)

## Fort Appocalypse

Synapse Software  
\$ 34.95 Diskette \*\*\*\*+  
for: C64

Take your jet copter down thru tunnels and caves. Good arcade action, but the difficulty of surviving, makes this game a bit frustrating.

(-B.D.)

## Gridrunner

HES  
\$ 39.95 ROM \*\*\*\*+  
for: C64

Fast & colorful, somewhat reminiscent of Atari's 'Centipede' but with many original twists.

(-B.D.) See Gallery, Issue #1

## Gridtrap

3R Import  
\$ :na Diskette \*\*\*\*+  
for: C64

If you want a sample of the recreational software that is popular in England, you can find quite a selection from 3R Imports. The idea here is to defuse the red bomb, evade the wandering boot, stay clear of the skulls, and watch out for traps as you travel about the grid.

(-B.D.) See Gallery, Issue #6

## Hard Hat Mack

Electronic Arts  
\$ 34.95 Diskette \*\*\*\*+  
for: C64

An entertaining arcade game, along the lines of, but not quite as good as 'Jumpman'.

(-B.D.)

## Neutral Zone

Access Software  
\$ 34.95 Diskette \*\*\*\*+  
for: C64

Deep space combat with smooth scrolling (360 degrees), 3-D realism and great sound effects. All machine language and hi-res. graphics.

(-B.D.)

## Rock n' Bolt

Activision  
\$ :na Diskette \*\*\*\*+  
for: C64

Your job is to move up thru the various levels of a skyscraper, and bolt down the girders which are sliding around all over the place. You must arrange them exactly as the blueprint inset shows. Cute with nice sound and music, but it doesn't begin to equal the calibre of Activision's recent hit 'GhostBusters'.

(-B.D.) See Gallery, Issue #6



### Saucer Attack

Sachs Enterprises  
\$ 29.50 Diskette  
for: C64

\*\*\*+

Don't let one nice graphic screen fool you into thinking there are more. Only one other screen is included in this game and it shows a slightly larger flying saucer, the mother ship, hovering in space. If you win the game, the capitol screen returns with a small fireworks display, an anticlimax.

(-B.D.) See Gallery, Issue #5

### Scrolls of Abaddon

Access Software  
\$ :na Diskette  
for: C64

\*\*\*+

You travel around on a sliding grid looking for scrolls, your travels are complicated by the restriction that you may not retrace your steps in an opposing direction. This is my least favorite offering from Access Software so far.

(-B.D.) See Gallery, Issue #6

### Beach-Head II

Access Software  
\$ 34.95 Diskette  
for: C64

\*\*\*

Sequel to Beach Head I. Live action video footage was supposedly used as a basis for the animation of BH II's characters. The result of such graphics techniques, combined with digitally simulated cries like 'Medic!', and 'Ahhh! I'm hit!', is a bloody game which seems best suited for 10 year old boys who have a limited comic-book allowance, and have tired of torturing G.I.-Joe at the hands of Skeletor!

(-B.D.)

### Moonsweeper

Imagic  
\$ :na Diskette  
for: C64

\*\*\*

Has some interesting effects, but suffers from repetition. The foreshortened scrolling background is perhaps the game's strongest feature. Basically you shoot the creeps, rescue the good folk, and get the heck out. Then do all over again (and again...) with increasing levels of both difficulty and tedium.

(-B.D.) See Gallery, Issue #7

### Motor Mania

United Microware Industries  
\$ 29.95 Tape  
for: C64

\*\*\*

Smooth scrolling animated driving game is quite enjoyable. One of the earliest machine language games that came out for the C64, it's still fun after all these years.

(-B.D.) See Gallery, Issue #1

### Pole Position

AtariSoft  
\$ 39.95 Diskette  
for: C64

\*\*\*

A big hit in the arcades, but the magic has not been translated well for the C64. Chunky graphics and animation, unsophisticated sound effects and unconvincing joystick response, make this racing game seen like an amateur effort. If you want a really hot racing game, you won't find it here.

(-B.D.) See Gallery, Issue #6

### Purple Turtles

Quicksilver  
\$ 29.95 Tape  
for: C64

\*\*\*

An entertaining, well-animated, non-violent game that has you crossing a stream on the backs of unpredictable diving turtles (sort of like Frogger only in cross section).

(-B.D.) See Gallery, Issue #2

### Targon 64

Net Software  
\$ :na Diskette  
for: C64

\*\*\*

Pretty standard space shoot-em' up fare here, with some better than average sprite design, which results in some targets that are not unlike those found in the Atari arcade hit 'Xevious'.

(-B.D.) See Gallery, Issue #6

### Warp!

Creative Software  
\$ :na Diskette  
for: C64

\*\*\*

After games like 'Pit Stop II', the animation seems pretty unsophisticated. An obvious attempt at variety and originality in the game elements keeps this outside the kennel, but not by much. If you want to add a Creative title to your collection try 'Trolls & Tribulations'.

(-B.D.) See Gallery, Issue #7

### Indiana Jones / Lost Kingdom

MindScape  
\$ 29.95 Diskette  
for: C64

\*\*\*-

The idea is great: a set of problem-solving games with no instructions where you must use your wits & logic, like 'Indy' would to survive and complete the 6 rooms. Unfortunately all fail to translate this into a satisfying product. This game is boring and roughly animated. Sure to disappoint Indiana Jones fans.

(-B.D.) See Gallery, Issue #7

### Alpha-Omega Run

Nanosec  
\$ :na Diskette  
for: C64

\*\*\*+

Routine space-opera number lacks anything special to recommend it over scores of predecessors. Line 'em-up and shoot 'em-down. Save the world. You'd think that programmers would get tired of grinding out these endless shoot-em-up clones.

(-B.D.) See Gallery, Issue #7

### Vaudeville

Showbiz  
\$ 24.95 Diskette  
for: C64

\*\*\*+

The premise itself is pretty dry: pick up plates, spin them on sticks, keep them spinning and duck flying objects. What really drags this game down is the execution: blocky sprites, character graphics and crude animation.

(-B.D.) See Gallery, Issue #7

### 3 for Fun

JAL Software  
\$ 12.95 Diskette  
for: C64

3 joystick controlled action games in compiled BASIC. Backwoods driver, Fastrack, and Rainball.



### Arcade Album

Penguin Software  
\$ 19.95 Diskette  
for: C64

Collection of 3 games, 'Spy's Demise', 'Spy Strike Back', and 'Thunderbombs'.

### Ballblazer

Epyx  
\$ 39.95 Diskette  
for: C64

A Lucasfilm game where you and an opponent scurry around a 3-D playing field, each trying to gain possession of a fast moving ball. Features high speed action and futuristic looking graphics.

### Bandits at 4 o'clock

Infinity Software  
\$ 25.00 Diskette  
for: C64

Recreates a WWII scenerio which places you as the tail gunner in a B-36 bomber. You must defend your plane from the fast deadly enemy fighters. Skill and reflexes are required to prevent destruction of your aircraft by an enemy determined to shoot you down. Joystick required.

### Battle Through Time

Artworx Software  
\$ 19.95 Diskette  
for: C64

In the year 2525 AD, time travel is perfected and you are sent through time to assist mankind in various battles from prehistoric ages to the final conflict. Employs full screen graphics with 3 layer scrolling for more realistic movement.

### Beyond Castle Wolfenstein

Muse Software  
\$ 34.95 Diskette  
for: C64

The underground has smuggled a bomb into the Fuehrer's Berlin bunker and it is your duty to locate the bomb and plant it in the Fuehrer's secret conference room, set the timer, and escape alive.

### Boulder Dash

First Star  
\$ 29.95 Diskette  
for: C64

Utilizes the property of gravity with falling boulders.

### Castle Wolfenstein

Muse Software  
\$ 29.95 Diskette  
for: C64

You've been captured by the Germans during WWII and taken to Castle Wolfenstein for interrogation. A dying cellmate has given you a gun with 10 bullets, your mission (you can't refuse) is to escape the castle with secret war plans.

### Cavern Construction Kit

Nufekop  
\$ 24.95 Diskette  
for: C64

Space cavern game featuring smooth scrolling graphics, edit mode, four separate caverns of different difficulties of terrain.

### Cyberworld

Progressive Peripherals  
\$ 15.95 Diskette  
for: C64

You are a special agent in a universe full of hostile aliens and robots. Over 100 sprites and dozens of sound effects.

### Elevator Action

Datasoft  
\$ 29.95 Diskette  
for: C64

Like the arcade game with all 30 stories.

### Game Pack

Nanosec  
\$ 34.95 Diskette  
for: C64

Two games where you become the president and fight bureaucrats and Russians in White House Blues, or protect the Earth in Alpha Omega Run.

### Ghost Chaser

Artworx Software  
\$ 19.95 Diskette  
for: C64

Features animated, hi-res graphics and multiple game screens in a challenging problem solving format. Explore the rooms of an old manor but watch out for anything that moves.

### Great American Road Race

Activision  
\$ 29.95 Diskette  
for: C64

You are driving at speeds up to 100 mph and you must deal with changing road conditions and of course cops with speed radars.



### Battle Trek

Touch Technologies  
\$ 29.95 Diskette  
for: C64

Action game designed especially for 'TREKIES'. The game is a battle between the starship Enterprise and an invading horde of Klingons. The object is to rid the galaxy of Klingons within 50 star dates while achieving as high a score as possible. There are 3 skill levels and a comprehensive user's guide is included.



### Lode Runner's Rescue

Synapse  
\$ 34.95 Diskette  
for: C64

You become Alexandria, Lode Runner's daughter, and you must successfully negotiate 46 mazes on the way to rescue your father from prison. This LR sequel is in 3-D and has a built-in game editor that is easy to use with graphic icons.

### London Blitz

Avalon Hill  
\$ 25.00 Disk or Tape  
for: C64

Enter the perilous world of bomb disposal during WWII. German bombers turned daily existence in London into a nightmare. Be carefull and God save the queen!

### Mr Do!

Datasoft  
\$ 29.95 Diskette  
for: C64

All the features of the arcade game of the same name.

### Pole Position II

Datasoft  
\$ 29.95 Diskette  
for: C64

Provides edge of your seat Formula I racing on four tracks or design your own.

### Skyfox

Electronic Arts  
\$ 34.95 Diskette  
for: C64

Realistic combat flight simulator with on-board flight radar. You can't crash yourself, but you can get blown to bits.

### Space Pilot

Artworx Software  
\$ 19.95 Diskette  
for: C64

Your mission will require you to pilot your craft through time and space battling squadrons of combat aces from the past to the future. Excellent screen scrolling and a responsive controls.

### Space Taxi

Muse Software  
\$ 29.95 Diskette  
for: C64

You are a 23rd century cab driver, presented with 24 different action packed screen predicaments. Exciting music and sound effects and voice synthesis.

### Starsweep

JAL Software  
\$ 9.95 Diskette  
for: C64

2 player nonviolent action game in compiled BASIC. Just sweep your star into the goal and keep your opponent from doing the same.

## CONVENTIONAL GAMES



Computerized versions of traditional games, or new games in a more "board-game" style.

### Chess 7.0

Odesta  
\$ 69.95 Diskette \*\*\*\*\*  
for: C64

These games just don't play you, they teach you and help you analyze the game and your playing style. You can: set up situations, replay games, switch sides, watch your computer think or get advice. Three keys control all the functions. Levels of play from beginner to master.

(-B.D.)

### How Bout a Nice Game of Chess

Odesta  
\$ 29.95 Diskette \*\*\*\*\*  
for: C64

Same analytical features through all but the hardest level of Chess 7.0. Includes several on-screen graphically illustrated chapters of instruction from piece identification & openings to development & endgames. This is programming design, execution and documentation at its finest.

(-B.D.) See Gallery, Issue #3

### Monty Plays Scrabble

Epyx  
\$ :na Diskette \*\*\*\*\*  
for: C64

The process of computerizing scrabble (the all-time best selling word game) has not only left the original intact, it has enhanced it tremendously. 1 or 2 players, colorful board, 12,000 word on-line dictionary and a host of options. Sound effects are just right. Scrabble lovers won't be disappointed.

(-B.D.) See Gallery, Issue #6

### Charles Goren: Learning Bridge

CBS Software  
\$ 79.95 Diskette \*\*\*\*\*  
for: C64

Learning bridge is at least made easier, if not easy. Charles Goren may be the best known name in bridge. This is the perfect method by which to learn bridge. The manual (which is well done) parallels the programs on disk.

(-B.D.) See Gallery, Issue #5

### Renaissance

United Microware Industries  
\$ 29.95 Tape \*\*\*\*\*  
for: C64

A smart version of reversi a.k.a. othello. Using the joystick or keyboard you pit yourself against a master. Extensive options allow for skill-level, specific board set-ups, taking back any number of moves, switching sides or getting advice.

(-B.D.) See Gallery, Issue #1



## Backgammon & Euchre

Hutchcraft  
\$ 19.95 Disk or Tape  
for: C64

Traditional backgammon - user vs. computer and four-hand partnership euchre for one player.

## Blackjack Tutor

Briley Software  
\$ 19.95 Tape  
for: C64

Learn to hit, stand, double, and split efficiently. Full card graphics with 150 key practice scenarios. It assumes 2 decks (not a card counting scheme).

## Bridge 4.0

Artworx Software  
\$ 24.95 Disk or Tape  
for: C64

Allows you and your computer partner to bid (unlimited) against two computer opponents and play out the hand. The program reviews the bidding, keeps score and tricks taken and will inform you of an illegal bid.

## Casino 64

Quantum Leap  
\$ 16.00 Diskette  
for: C64

Two casino games, Slots and Poker.

## Casino Roulette

Powerline Software  
\$ 39.95 Disk or Tape  
for: C64

Provides nearly all functions of roulette as played in American and European casinos. Displays roulette board, places chips as bets and displays a roulette wheel with ball spinning.

## CompuBridge

Artworx Software  
\$ 24.95 Diskette  
for: C64

For anyone who wants to improve their bridge game or for someone who has never played before. Based on a popular bridge text and consists of 10 tutorials and 8 computer generated quizzes to aide you in the game.

## CryptoWord 64

Lawco  
\$ :na Diskette  
for: C64

Word game for 1 to 4 players to form words with letters that are randomly generated by the computer.

## Grand Master Chess

Artworx Software  
\$ 24.95 Disk or Tape  
for: C64

Has 10 skill levels to choose from and can serve both as an instructive tutor for beginners and a challenging competitor for the serious player. Has many features like number of moves made, computer's & your last move, dual timer, color and more.

## In Search Of...

Sher-Tek  
\$ 14.85 Diskette  
for: C64

Word search game with pre-built games, clock, challenging levels and ability to create your own games.

## Pensate

Penguin Software  
\$ 29.95 Diskette  
for: C64

Original thinking game of evasion.

## Sargon III

Hayden  
\$ 44.95 Diskette  
for: C64

Features 9 levels of play and a library of 68,000 moves. Provides instruction for the novice and brain teasing chess problems for the master.

## Strip Poker Data Disk 1-3

Artworx Software  
\$ 19.95 Diskette  
for: C64

Additional opponents to be used with 'Strip Poker' master disk by Artworx. Each disk provides 2 additional opponents (disks #1 & #2 are female and #3 has male opponents).

## Strip Poker

Artworx Software  
\$ 29.95 Disk or Tape  
for: C64

This unique program has graphics so realistic that we can't illustrate what you see when you win. Comes with Suzi and Melissa, two gorgeous opponents each with their own style of play and the more you win the more they take off. Additional data disks are available with new male and female opponents.

## Wurble

Sher-Tek  
\$ 14.85 Diskette  
for: C64

Computer board game with editor to allow 100s of rule variations.



## AdventureWriter

CodeWriter  
\$ 50.00 Diskette \*\*\*\*  
for: C64

Produces classic text adventures with options for using color text and simple sound effects. 38K is available and the finished adventure is in M.L. for fast and unlistable code, and entirely memory resident. Also creates royalty free adventures.

(-M.B.) See review, Issue #5

## Deadline

Infocom  
\$ 39.95 Diskette \*\*\*\*  
for: C64

You are the detective solving a murder in this exciting adventure. Very realistic characters with distinct personalities. Expert level.

(-B.D.)



## Robots of Dawn

Epyx  
\$ 39.95 Diskette \*\*\*\*  
for: C64

All text and no graphics does not make this a dull game at all. While based on the book by Isaac Asimov, the plot changes somewhat for each game. The color coded screen information makes it easy to distinguish the source and the type of information. Thoughtful programming is evident in the responses to player input.

(-B.D.) See review, Issue #5

## Starcross

Infocom  
\$ 39.95 Diskette \*\*\*\*  
for: C64

Text adventure with a science fiction theme in the year 2186, where you are destined to rendezvous with a gargantuan starship from the outer fringes of the galaxy. Expert level.

(-B.D.)

## Suspended

Infocom  
\$ 39.95 Diskette \*\*\*\*  
for: C64

Unique interactive-prose adventure from the company that brought you Zork and Deadline. In this one you command 6 robots each with distinct personalities and various abilities in an effort to avoid world wide catastrophe. Includes a map for tracking your 6 robots. Expert level.

(-B.D.) See Gallery, Issue #1

## Bible Trip

Smokey Mountain Software  
\$ 19.95 Diskette  
for: C64

Adventure game true to New Testament geography. For ages 10 and up.

## Brimstone/Essex/Mindwheel

Synapse Software  
\$ 39.95 Diskette  
for: C64

Three individual text adventures (electronic novels), operates in real time.

## CodeWriter Adventures

CodeWriter  
\$ 19.99 Diskette  
for: C64

Adventure programs of all sorts for 19.99 each. Includes Sherlock Holmes Returns, Times Wrath, Trilogy of Time, Day Before parts 1 & 2, and Fortress Series.

## Cut Throats

Infocom  
\$ 39.95 Diskette  
for: C64

This text adventure places you on an out-of-the-way island populated by some disreputable characters. You're a diver for hire and they hire you to recover some sunken treasure. Standard level.

## Cyborg

Sentient Software  
\$ 34.95 Diskette  
for: C64

Science fiction text adventure with full word input.

## Enchanter

Infocom  
\$ 39.95 Diskette  
for: C64

In the Zorkian tradition, you are a beginning magician whom Fate has chosen to do singlehanded combat with a dark and fierce power. Standard level.

## Escape

Infinity Software  
\$ 25.00 Diskette  
for: C64

Text adventure loaded with suspense and excitement with the added dimension of sound effects and inter-active screens. Your problem solving ability and logic are put to the test, by trying escape from some aliens jailors and their robot sentries, but be careful, the Earth's fate is in your hands.

>>>> Circle Reader Service No. 20 <<<<

## Expedition Amazon

Penguin Software  
\$ :na Diskette  
for: C64

Fantasy role playing game into the deep, dark amazon.

## Fur Trapper

Briley Software  
\$ 12.45 Tape  
for: C64

Explore the Rocky Mountains in 1848 with all its danger and lore.

## High Seas

Briley Software  
\$ 12.45 Tape  
for: C64

Sail the Atlantic in 1811 and recover gold, but beware of mutiny!

## Infidel

Infocom  
\$ 39.95 Diskette  
for: C64

Another Infocom text adventure where you are marooned by your followers in the heart of the Egyptian desert. You have come in search of a great lost pyramid and its untold riches. Advanced level.

## PDI Adventure Disk

Public Domain  
\$ 10.00 Diskette  
for: C64

Three adventure programs on one disk. Includes: 'The Original Text Adventure', 'Castle' and 'Lost Gold'.

## Planetfall

Infocom  
\$ 39.95 Diskette  
for: C64

You are teleported forward in time to a Stellar Patrol ship, where your rank is Ensign 7th Class (the lowest). The ship explodes and you are jettisoned to a deserted and mysterious world, where you must dare its dangers and try to save it. Standard level.

## Sorcerer

Infocom  
\$ 39.95 Diskette  
for: C64

Another text adventure that poses you with a mystical clue and a magical tour thru the darker side of the Zorkian Empire. Advanced level.



## Suspect

Infocom  
\$ 39.95 Diskette  
for: C64

This time you are the suspect, and Sgt. Duffy wants you! You must solve the murder to clear your name and do it amidst the activity of masked ball in a mansion. Advanced level.

## Text Adventure Pack

Nanosec  
\$ 34.95 Diskette  
for: C64

Two adventures (Hacker and Wizard's Wand) in machine lang., enter full sentences, load and save games.

## Thriller Series 2

CodeWriter  
\$ 19.99 Diskette  
for: C64

Three adventure programs on one disk, includes Shipwrecked, Frankenstein's Legacy, and The Son of Ali Baba.

## Thriller Series

CodeWriter  
\$ 19.99 Diskette  
for: C64

Three adventure programs on one disk, includes Night of the Walking Dead, Perils of Darkest Africa, and Revenge of the Moon Goddess.

## Witness

Infocom  
\$ 39.95 Diskette  
for: C64

Spine-tingler of a blackmail case that turns into murder before your eyes, and anyone from the knockout heiress to the poker-faced Oriental butler could be the killer. Standard level.

## Zork I, II, III

Infocom  
\$ 39.95 Diskette  
for: C64

The Great Underground Empire confronts you with perils and predicaments ranging from the mystical to the macabre, as you strive to discover the Treasures of Zork and escape with them and your life. Zork I is of standard level and II & III are advanced levels.

## GRAPHIC ADVENTURES

INFO

Illustrated adventure adds color to the plot, and especially aids younger players.

## Exodus: Ultima III

Origin Systems  
\$ 59.95 Diskette \*\*\*\*\*  
for: C64

As in chess, the game pieces in this are better at some things and poorer at others. You assemble 4 adventures and then roam a strange, enchanted land. Documentation is mysterious too, providing only bare essentials. You can save games in progress to disk.

(-B.D.) See review, Issue #5

## Countdown to Shutdown

Activision  
\$ :na Diskette \*\*\*\*\*  
for: C64

One of the better offerings from Activision since 'GhostBusters'. Even before you figure out the object of this game, you will enjoy the delightful 3-D graphics effects, well-done animation (with shadows), sound effects, detailed information displays, and fluid gameplay. The object: your androids must prevent a nuclear meltdown.

(-B.D.) See Gallery, Issue #7

## Adventure Creator

Spinnaker  
\$ :na Diskette \*\*\*\*\*  
for: C64

A marvelous graphics adventure creation program, that creates a dungeon for children to explore and populates it with strange creatures and wonderful treasures, or lets them create their own. The quests are challenging and non-violent. Another solid winner from Spinnaker.

(-M.B.) See review, Issue #6

## Curse of Ra

Epyx  
\$ 19.95 Disk or Tape \*\*\*\*\*  
for: C64

Expansion module for 'Temple of Apshai'.  
(-B.D.)

## Murder by the Dozen

CBS Software  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

An engrossing collection of detective adventures for one to four players. Assuming your favorite sleuth personas, you will search for clues, question suspects, draw your conclusions and finally announce your solution. Includes clue book and answer book.

(-B.D.) See Gallery, Issue #6

## Murder on the Zinderneuf

Electronic Arts  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

Like starring in a detective novel instead of just reading it. There is a different case to solve each time, and you conduct the investigation your way. 16 passengers and 16 cabin rooms with furnishings.

(-B.D.) See Gallery, Issue #5

## Serpent's Star

Broderbund  
\$ :na Diskette \*\*\*\*\*  
for: C64

This hybrid adventure game is a noticeable improvement over 'Mask of the Sun'. Toggle fast or slow travel between locations. Screens are colorful, the action smooth, the parser forgiving and intelligent, the storyline is interesting, the puzzles just hard enough and refreshing humor.

(-B.D.) See Gallery, Issue #7

## Seven Cities of Gold

Electronic Arts  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

An adventure game of discovering the new world in the late 1400's. Carefully balance your resources between the number of ships, men, supplies and valuables to trade or give the natives. You'll like this one if you like exploring and can negotiate with unpredictable natives.

(-B.D.) See Gallery, Issue #5



## Sword of Fargoal

Epyx

\$ 29.95 Disk or Tape \*\*\*\*  
for: C64

The junior version of 'Temple of Apshai', with a simpler command interface for younger or less patient players.

(-B.D.) See Gallery, Issue #1

## Telengard

Avalon Hill

\$ 24.95 Diskette \*\*\*\*  
for: C64

A classic graphic underground adventure featuring a reputed 50,000 rooms to explore. A full complement of monsters, characters, weapons, and spells inhabits the world of Telengard. Not as imposing, varied, or impressive as others like Ultima, but inexpensive and colorful. Good manual & reference card and demo mode.

(-M.B.) See review, Issue #6

## Temple of Apshai

Epyx

\$ 39.95 Diskette \*\*\*\*  
for: C64

Excellent rendition of the award-winning graphic adventure. Makes good use of the 64's hi-res, sound, and sprites. Surpassing Apple and Atari versions. We liked the elfen text fonts and sprite animation. Additional modules allow extended play.

(-B.D.) See Gallery, Issue #1

## The Institute

Screenplay

\$ 29.95 Diskette \*\*\*\*  
for: C64

You've been committed against your will, now if you can just talk, find or claw your way out. A few suggestions from the manual will get you started, but some imagination is needed to get beyond the first hallway.

(-B.D.) See Gallery, Issue #5

## Upper Reaches of Asphai

Epyx

\$ 19.95 Disk or Tape \*\*\*\*  
for: C64

Expansion module for 'Temple of Apshai'.

(-B.D.)

## Alcazar: Forgotten Fortress

Activision

\$ :na Diskette \*\*\*\*-  
for: C64

Interesting graphic variation of the ubiquitous dungeon adventure. You must collect and properly use the right objects and weapons in order to overcome your various adversaries and complete your quest.

On-screen map and large over-view map.

(-B.D.) See Gallery, Issue #7

## Mask of the Sun

Broderbund

\$ 39.95 Diskette \*\*\*\*-  
for: C64

Jump into your jeep with your faithful companion, Raoul, and you're off to the jungle to search for treasures amongst the ancient ruins. This one stands out mostly for its graphics, which includes well drawn static and animation screens. Children will especially like this for its visuals. Easy to get into and the riddles are just hard enough to challenge without frustration.

(-B.D.) See Gallery, Issue #5

## Standing Stones, The

Electronic Arts

\$ 39.95 Diskette \*\*\*\*+  
for: C64

Not up to EA's usual quality, the screens consist of the standard hallway labyrinth drawn with straight, converging lines and creatures drawn with character graphics. Looks like most of the effort went into packaging, the title screen and translations into Old English ('Canst thou toggleth?').

(-B.D.) See Gallery, Issue #5

## Caveman

Zinta Micro Systems

\$ :na Diskette \*\*+  
for: C64

This prehistoric adventure game has fine graphics screens, but as an adventure game it's awful. Every response you type in causes a lengthy disk-access (and there are 3 disks with both sides filled!), maybe a hard disk would make this more playable.

(-B.D.) See Gallery, Issue #6

## Dolphins Rune

MindScape

\$ 29.95 Diskette  
for: C64

Takes you into a mystical colorful underwater world with the object to find hieroglyphics hidden in the sea, that may be linked together creating a poem that reveals the secret to ancient dolphin lore.

## Gateway to Apshai

Epyx

\$ 29.95 ROM  
for: C64

Cartridge sequel to 'Temple of Apshai'.

## Goonies

Datasoft

\$ 29.95 Diskette  
for: C64

Based on the hit Spielberg movie. Lets you relive the thrills and dangers of the big screen as the Goonies kids go after the pirate treasure while trying to unscramble the tricks of each screen.

## Gothmog's Lair

Progressive Peripherals

\$ 19.95 Disk or Tape  
for: C64

Real time adventure, where you try to recover 13 treasures. Includes old english script, manual and map.

## Mansion! / Museum! / Pentagon!

Briley Software

\$ 12.45 Tape  
for: C64

Three detective programs available separately, each with different locations, but with similar plots, where you must determine 'who did it'.

## Maxwell Manor

Avalon Hill

\$ 28.00 Disk or Tape  
for: C64

A murder mystery in a haunted mansion that you must solve. 1,000 play variations.



## Ninja: Orb of Celestial Har.

Origin Systems  
\$ 59.95 Diskette  
for: C64

Fantasy role playing game set in mythical oriental land. Travel through the elemental planes of earth, water, air, and fire, in search of the warlord. Hand to hand Karate style fighting and sword play.

## Quest

Penguin Software  
\$ :na Diskette  
for: C64

A quest to rid the kingdom of a vengeful dragon.

## Swiss Family/Below the Root

Spinnaker  
\$ 44.95 Diskette  
for: C64

Two graphic adventure based on the popular books, respectively.

## Sword of Kadash

Penguin Software  
\$ :na Diskette  
for: C64

Explore a dragon's castle to find the magical Sword of Kadash.

## Transylvania

Penguin Software  
\$ :na Diskette  
for: C64


Search all of Transylvania to find and rescue the princess.

## Xyphus

Penguin Software  
\$ 34.95 Diskette  
for: C64

Fantasy role playing game with 6 scenarios and four player independent movement.

# STRATEGY AND SIMULATION

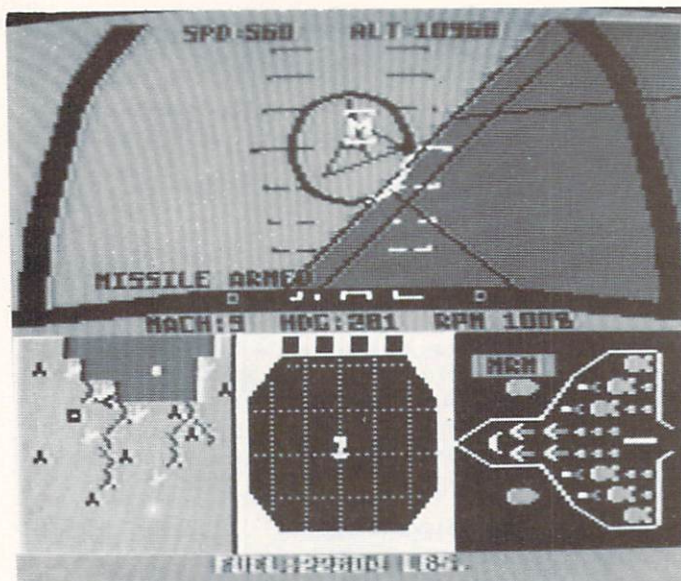


Fly a plane or fight a war! This category squeezes the world, real and imaginary, into your computer.

## Combat Leader

Strategic Simulations  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

Scrolling hi-res battlefield shows trees, rocks, topography & enemy armor. Command your 5 tanks together or individually, deploy foot troops, send commands via radio (on-screen command line). Design your own scenarios, simple or very elaborate.  
(-B.D.) See Gallery, Issue #3



## F-15 Strike Eagle

MicroProse Software  
\$ 34.95 Diskette \*\*\*\*\*  
for: C64

A captivating game experience flying a fighter bomber. Not as finicky and crash prone as some flight simulators (this plane is considered landed by just coming close to your base). The real action and pleasure of this game is combat flying, bombing, and dog fighting. The cockpit is detailed and the action is convincing. Four skill levels.

(-B.D.) See Gallery, Issue #5

## Flight Simulator II

Sublogic  
\$ 49.95 Diskette \*\*\*\*\*  
for: C64

Hi-res real-time color animated flight simulator with practice takeoffs, landings & aerobatics in your Piper 181 Cherokee Archer or fly into WWI dogfight. Includes 80 airports (NY, Chicago, Seattle & LA), adjustable weather conditions, complete instrumentation and documentation.

(-B.D.) See review, Issue #4

## Summer Games II

Epyx  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

The sequel to SG I with 8 new events: cycling, fencing, kayaking, triple jumping, rowing, high jumping, javelin throwing and equestrian. Well-done with exceptional realism as well as EPYX's usual top-notch input and control routines. Am looking forward to the 3rd sequel: Winter Games!

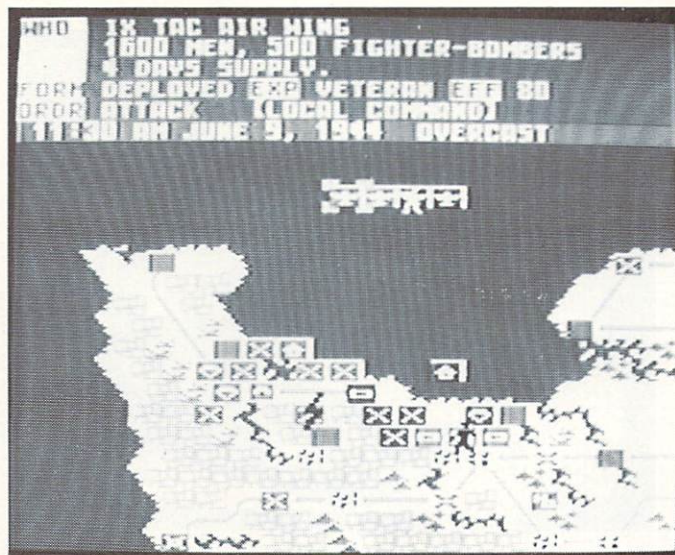
(-B.D.)

## Dragons of Pern

Epyx  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

Based on the popular Anne McCaffrey fantasy novels. You are one of the weyr leaders, riding your dragon, fighting the deadly 'thread' and maneuvering thru the delicate politics of the lord holders. Multiple screens and varying activities keep you going.  
(-B.D.) See Gallery, Issue #3





### Crusade in Europe

MicroProse Software

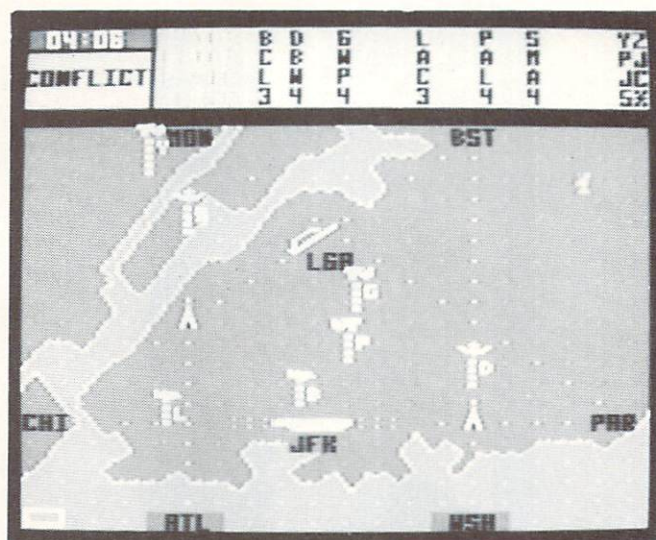
\$ 34.95 Diskette

for: C64

\*\*\*\*

From D-day to the Battle of the Bulge, you will have the chance to replay the hands dealt by history in this real-time strategic war-game simulation. A large scrolling map shows terrain and troops with your choice of symbolic or pictorial game pieces. Very easy to start playing, but amply complex for crustier war-gamers. Sound effects and graphics are just right.

(-B.D.) See Gallery, Issue #7



### Kennedy Approach

MicroProse Software

\$ 34.95 Diskette

for: C64 C128

\*\*\*\*

Best air traffic controller as of July 1985. Sports several advanced and unique features that help make it work (good quality speech synthesis and visual indication of altitude for planes, gives you 3-d visual information on a 2-d game grid). If you aren't getting enough tension in your life, this should help.

(-B.D.) See Gallery, Issue #7

### International Soccer

Commodore

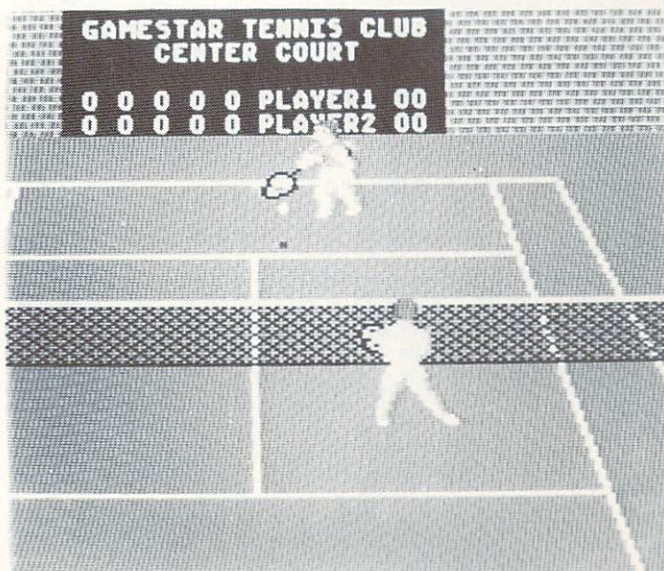
\$ 24.95 ROM

\*\*\*\*

for: C64

This is the best game Commodore has come out with to date (spring 1985). The most outstanding thing is the smooth and natural way that control passes from player to player without the conscious effort and awkward joystick manipulation required by most team sport simulations. Fast action, great graphics, 9 skill levels, and a joy to play.

(-B.D.) See Gallery, Issue #6



### On-Court Tennis

Gamestar

\$ 29.95

Diskette

\*\*\*\*

for: C64

Like their other sports simulations, Gamestar's tennis game features good animation with convincing 3-dimensional effect, including shadowing and foreshortening. 1 or 2 players, choice of surfaces (clay, grass, etc.), choice of character (Bjorn, Jimmy, etc.) and a surprising amount of joystick control (drop shots, etc.). This captures much of the real flavor of real tennis.

(-B.D.) See Gallery, Issue #6

### One on One

Epyx

\$ 39.95

Diskette

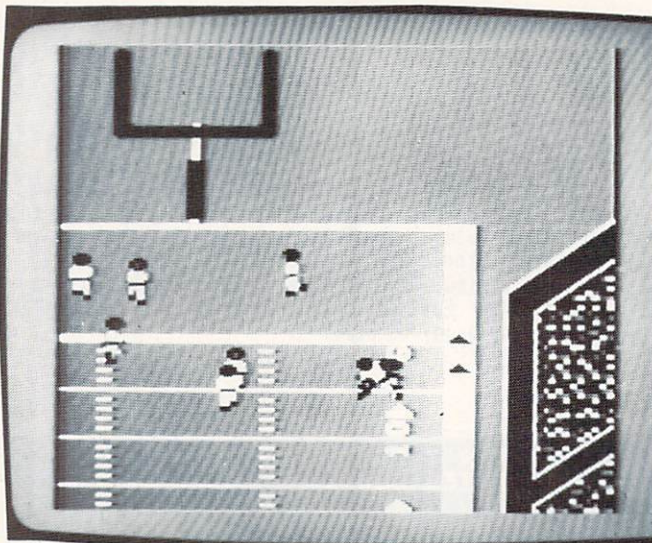
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for: C64

1 or 2 players may switch personalities with Dr. J or Larry Bird. All elements of the game have been included through excellent programming: dribbling, shooting, rebounding, stealing, blocking, 180-degree spins & slam dunks (easy on the backboard...its breakable). Referee calls the fouls, janitor sweeps up broken backboards, and instant replays on good moves.

(-B.D.) See Gallery, Issue #5



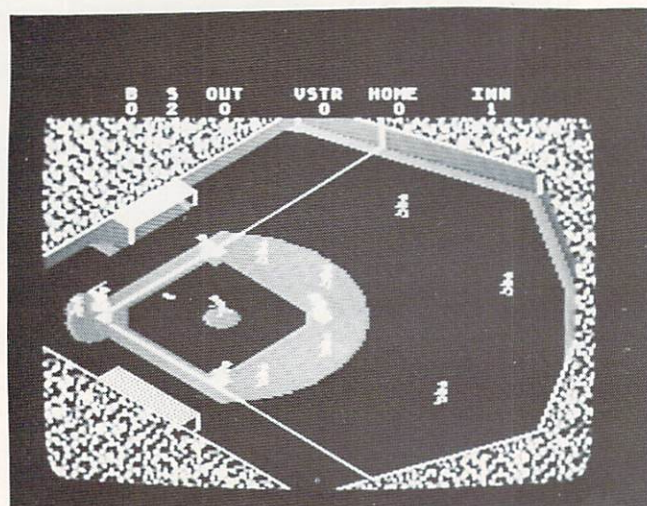


### On-Field Football

Gamestar  
\$ 29.95 Diskette \*\*\*\*  
for: C64

Rounds out the Gamestar series of animated action sports titles. While this version of the great Sunday obsession sends only 6 warriors per team into the skirmish, the action is well-done. Scrolling allows full field play, for 1 or 2 players.

(-B.D.) See Gallery, Issue #7



### Star League Baseball

Gamestar  
\$ 29.95 Diskette \*\*\*\*  
for: C64

The players are small and some what sketchy, yet very realistic in their motions. Wind ups, pitches, steal, bunt etc. Joystick control sequences are natural to learn, on screen score, count & inning. Batting practice options helps your batting average. The sound is well done also.

(-B.D.) See Gallery, Issue #5

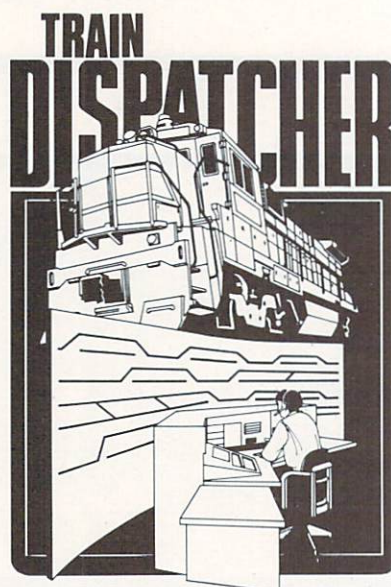


### Sonar Search

Signal Computer Consultants  
\$ 30.00 Diskette \*\*\*\*  
for: C64

A good sub game is hard to create and this one is good! As the commander of a trio of destroyers, you get that eerie feeling when you know they are out there, but the sonar signal is not returning. Separate screen for each ship and more than one sub to find, this is the battle of the bilge!

(-B.D.) See Gallery, Issue #5



### Train Dispatcher

Signal Computer Consultants  
\$ 25.00 Diskette \*\*\*\*  
for: C64

No flashy graphics, just an accurate simulation of a day in the life of a train dispatcher. You contend with train crew schedules, track maintenance, and transmit train orders to try and keep the trains rolling over 150 miles of track without a hitch for your full 8 hour shift.

(-M.B.) See review, Issue #6



## Summer Games I

Epyx

\$ 39.95

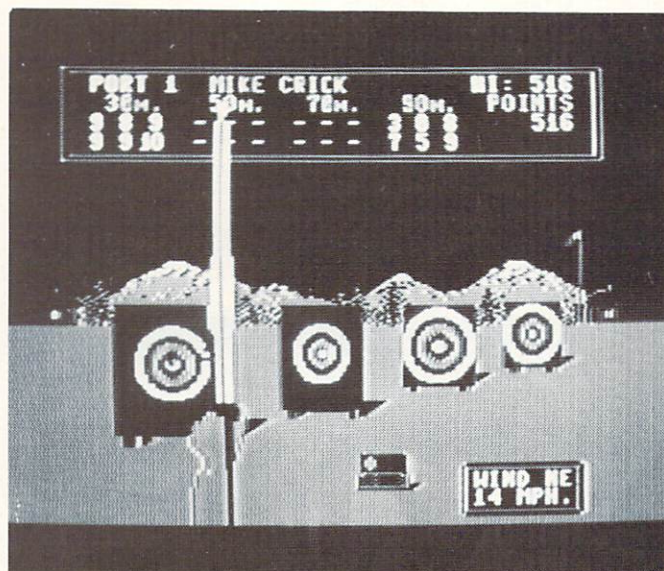
Diskette

\*\*\*\*

for: C64

The element of strategy is incorporated into 4 of the 8 events in a limited way: energy meter paces runner, harder gymnastic routines earn high points, etc. There is some wiggling and joy-button tapping used to propel athletes. Includes: running, swimming, diving, gymnastics and skeet shooting.

(-B.D.) See Gallery, Issue #5



## 'S' Games

Michael Crick

\$ 14.95

Diskette

\*\*\*\*-

for: C64

Previously published by HES as Hes Games. The track events (100m dash, long jump, hurdles) require a supple wrist. You can race others or your own 'saved' performance. Archery, with cross winds and four target distances is especially good. Diving is a challenge from belly-flops to triple somersaults. Even features instant replays!

(-Staff) See Gallery, Issue #5

## World's Greatest Baseball

Epyx

\$ 34.95

Diskette

\*\*\*\*-

for: C64

The statistical game plays any of 26 classic teams (through 1983) against another, where you are the manager, and player performance is based on actual records. Playing is a let down, player motions and ball movement is unrealistic and imprecise. Balls and strikes are not apparent to the viewer.

(-B.D.) See Gallery, Issue #5

## Legionnaire

Avalon Hill

\$ 30.00

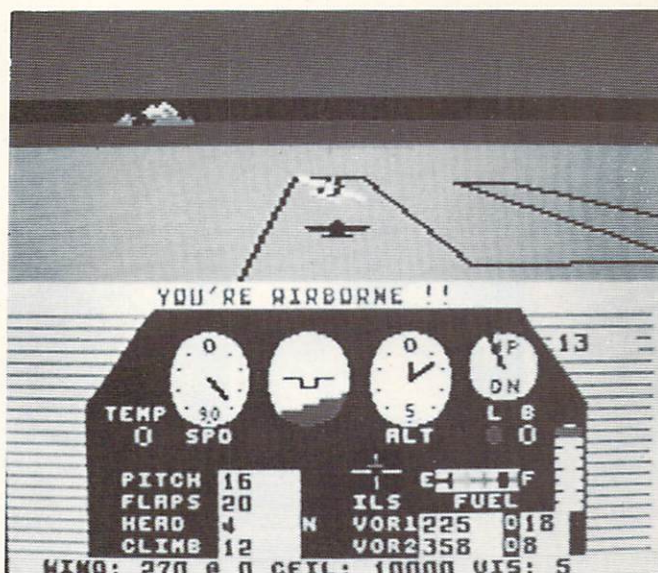
Disk or Tape

\*\*\*\*+

for: C64

A strategic war-game simulation which puts you out in the field as Julius Caesar with nothing but blood-thirsty barbarians from horizon to horizon. The sound effects of tramping boots may make you chuckle. Pretty good game controls and scrolling battle field.

(-B.D.) See Gallery, Issue #6



## Solo Flight

MicroProse Software

\$ 34.95

Diskette

\*\*\*\*+

for: C64

Great looking real-time light airplane simulation. 3-D terrain graphics, multiple airports, varying conditions, full instrumentation, air-mail game, VFR & IFR flying.

(-B.D.) See review, Issue #4

## M.U.L.E.

Electronic Arts

\$ 39.95

Diskette

\*\*\*\*+

for: C64

This is a charming game with something for everyone (for 0 to 4 players). It's sort of an off-planet monopoly game with plenty of horse-trading, backstabbing, lucky breaks, disasters, and just enough comic relief.

(-B.D.) See Gallery, Issue #2

## Pool-64

Abacus Software

\$ 34.95

Diskette

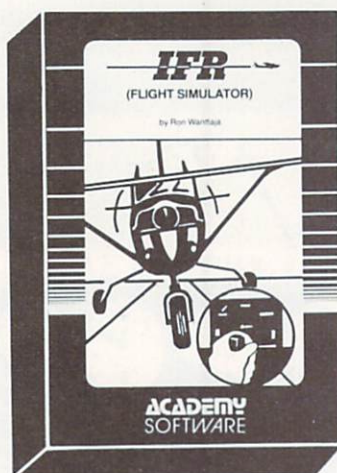
\*\*\*\*+

for: C64

Pretty nice pool simulation, aims & shoots with keyboard and realistic physics.

(-B.D.) See Gallery, Issue #3





### IFR (Flight Simulator)

Academy Software  
\$ 29.95 Disk or Tape \*\*\*  
for: C64

This flight simulator, while lacking a terrain view, is detailed functionally with apparently accurate instrumentation and responses (I'm no pilot so how do know?). You get rated for your performance landing at various airports (make sure the landing gear is down!).

(-B.D.) See Gallery, Issue #3



### Acrojet

MicroProse Software  
\$ 34.95 Diskette  
for: C64

Allows those pilots who have soloed in Solo Flight to now pilot their own personal jet, the BWS-J. You can then participate in a Decathlon of Sport Aviation events, including spot landings, ribbon cuts, acrobatics, and more. High performance flying, including rolls, loops, Immelmans all in 3-D.

### Alice in Videoland

Artworx Software  
\$ 19.95 Diskette  
for: C64

Computer adaptation that uses the full graphics and animation of the C64. Player guides Alice through the many encounters she will have while exploring Videoland. Includes all the favorite characters.

### Alter Ego

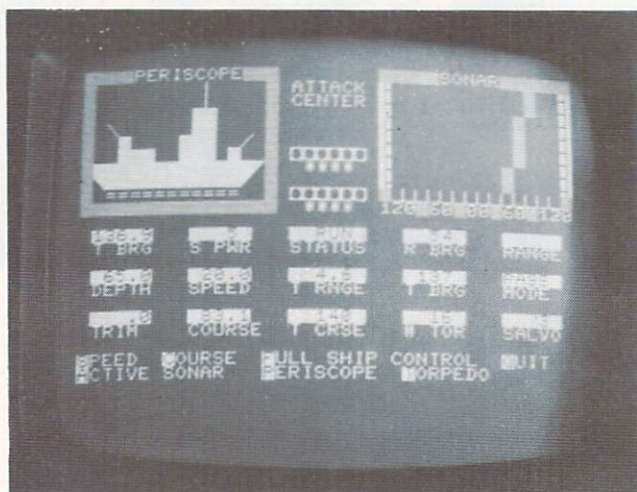
Activision  
\$ :na Diskette  
for: C64

Lets you create different personalities and alter their emotions, physical appearance and other situations that effect them.

### Alternate Reality

Datasoft  
\$ 39.95 Diskette  
for: C64

Role playing adventure game, as you try to survive in an alien environment.



### CCI Subwar 64

Clockwork Computers  
\$ 19.95 Disk or Tape  
for: C64

Classic simulation that puts you in complete control of a modern nuclear powered submarine. Your mission is to sail from port, dive, attack, sink surface ships, survive attacks, use sonar and ballast, all in real time. Training program and detailed operators guide included.

### Dam

Greenwood Software  
\$ 20.22 Disk or Tape  
for: C64

Real time simulation of the operation of a hydro-electric dam.

### Dreadnoughts

Avalon Hill  
\$ 30.00 Diskette  
for: C64

A wargame in the North Atlantic Ocean that recreates major naval action during WWII with a roster of 44 British, German, French, and American ships that sailed the Atlantic during that time.



### Fireworks Celebration Kit

Activision  
\$ 19.95 Diskette  
for: C64

Lets you create fireworks displays with music and special messages. Turn them into computer greeting cards.

### Flight Path 737

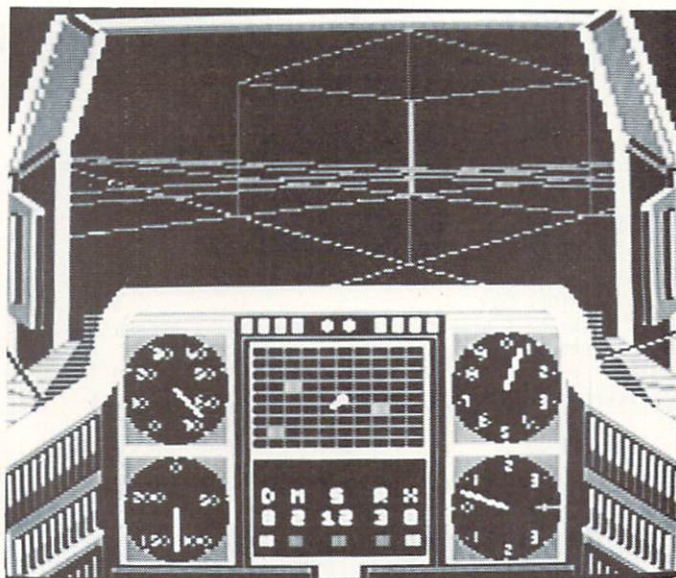
Artworx Software  
\$ 19.95 Diskette  
for: C64

Choose any of 6 different levels from novice to test pilot and receive your flight instructions. You control throttle, flaps, and landing gear as you take off.

### Gulf Strike

Avalon Hill  
\$ 30.00 Diskette  
for: C64

A wargame in the Persian Gulf. Pits the US and its European allies and Iran (???) against the Soviet Union and Iraq for the invasion of Afghanistan.



### Gunship

MicroProse Software  
\$ 34.95 Diskette  
for: C64 C128

Simulator of the new AH-64 Apache attack helicopter and features multiple weapon, navigational system, outstanding joystick flying system and 3-D graphics.

### Hellicat Ace

MicroProse Software  
\$ 29.95 Diskette  
for: C64

3-d combat flying simulation.

### International Hockey

Artworx Software  
\$ 24.95 Diskette  
for: C64

Sequel to 'Slapshot Hockey' with speech synthesis, 1 or 2 player action, and 3 levels of play.

### Jet Combat Simulator

Epyx  
\$ 29.95 Diskette  
for: C64

Highly realistic simulator recreates actual flight situations that arise in piloting a F15 jet fighter, such as cross-wind turbulence and blind landings. Four separate options enable you to progress from landing practice to air-to-air combat.

### Locomotive Switcher

Signal Computer Consultants  
\$ 30.00 Diskette  
for: C64

Uses high resolution graphics and sophisticated sounds to simulate railroad switching operations in an industrial area. There are 2 modes of operation, flat yard and hump. High scores can be achieved in both modes by minimizing moves and damage, and maximizing efficiency.

### Microbroker

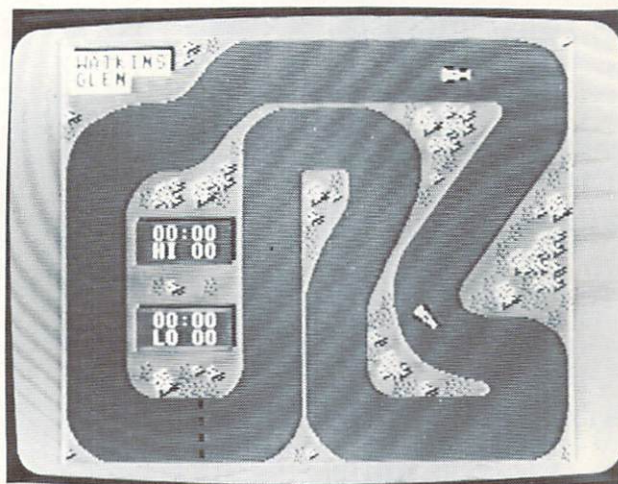
Cardinal Software  
\$ 34.95 Diskette  
for: C64

Stock market simulation, which supports up to 6 investors. Teaches players to invest based on their net worth and credit rating. Help screens for: news release, financial consultant, stock record displays and the investor's portfolio.

### NATO Commander

MicroProse Software  
\$ 34.95 Disk or Tape  
for: C64

On-screen scrolling European war map, real time, five scenarios & news service updates. You command the infantry, mechanized armor, and helicopters.



### On-Track Racing

Gamestar  
\$ 29.95 Diskette  
for: C64

Head to head competition against a champion computer racer or a friend from start to finish. Covers 10 world famous raceways (pavements to dirt tracks) and two racing modes (best time or most distance).



### Ringside Seat

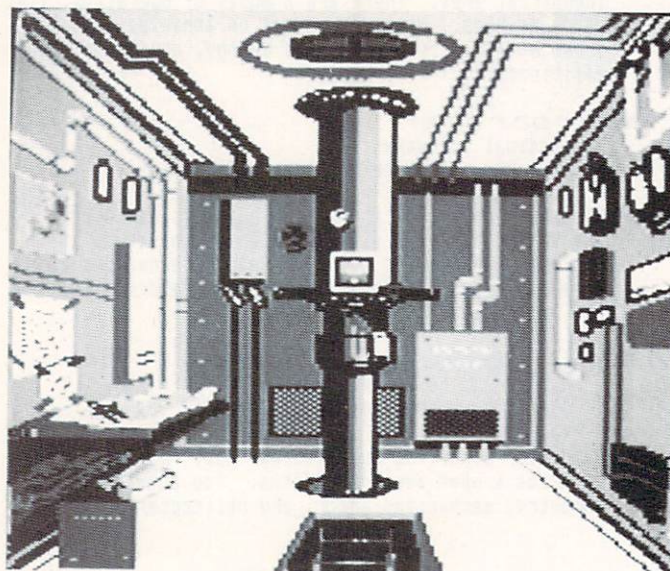
Strategic Simulations  
\$ 39.95 Diskette  
for: C64

Semi-animated boxing simulation, arrange the match-ups of the century and see who would have won.

### Run for the Money

Scarborough Systems  
\$ 39.95 Diskette  
for: C64

Action packed different game of strategy for 2 players, based on economic models by an MIT professor.



### Silent Service

MicroProse Software  
\$ 34.95 Diskette  
for: C64

A submarine simulation of WWII submarine combat in the Pacific. Features multi-sub locations including engine room, conning tower and ship's bridge.

### Six Gun Shootout

Strategic Simulations  
\$ 39.95 Diskette  
for: C64

Old west simulation with 10 scenarios of either fiction or historically accurate, and 18 weapons for man to man combat.

### Slap Shot Hockey

Artworx Software  
\$ 19.95 Diskette  
for: C64

Choose your team from the 6 countries in the 1984 Canada Cup Series and get set for the action. Features life-like voice, true 2 player control, real action passing, defense/offense strategies and body checking.

PLAYER 1

ROCKIN JO CARLOW




IMAGE:	HOT TEMPER
ATTITUDE:	UNCERTAIN
STAMINA:	6000
AGILITY:	LIGHTNING
STRENGTH:	FEEDLE
ENDURANCE:	UNPREDICT.
BEST PUNCH:	BODY SHOT
RECOVERY:	SPEEDY

BOXING STYLE	RECORD
SLUGGER	WINS DRAW KO'S LOST
	00 00 00 00
RANKING	EARNINGS
01	500

CONTINUE

### Star Rank Boxing

Gamestar  
\$ 29.95 Diskette  
for: C64

### Super Bowl Sunday

Avalon Hill  
\$ 35.00 Diskette  
for: C64

A realistic football simulation which puts you out in control of everything in 10 AFC/NFC match ups.

### Wingman / Mig Alley Ace

MicroProse Software  
\$ 34.95 Diskette  
for: C64


Player vs player, head to head, split screen 3-D combat flying simulations.

### World's Greatest Football

Epyx  
\$ 35.00 Diskette  
for: C64

Once the ball is snapped, the player takes control of offense or defense in fast-paced, head-to-head action. The play book can hold up to 120 plays and allows players to customize existing plays. Views including side-line, bird's eye or close-up.

EDUCATIONAL  
GAMES



Learning made fun!  
Math games, map games,  
quizzes and more.  
Students (hopefully)  
pay closer attention.

### Chipwits

Epyx  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

A fantastic program that is as educational as it is entertaining. Using the increasingly popular pull-down menus, you choose one of 16 Chipwit robots and program it to solve one of the 8 varying-difficulty adventures. Programming is done with pictures and can be rather elaborate.

(-B.D.) See Gallery, Issue #7



## The Factory

Sunburst Communications  
\$ 44.95 Diskette \*\*\*\*\*  
for: C64

This is a wonderful edu-game which stimulates problem-solving, visualization, and spatial comprehension. Players must use a variety of machines to create simple to complex parts.

(-B.D.) See Gallery, Issue #3

## Little Red Riding Hood

Playground Software  
\$ 29.95 Disk or Tape \*\*\*\*\*  
for: C64

One of a series of bedtime stories. Requires the 'Edu-mate Light Pen'. Features software-synthesized voice of Freddy the Frog (aka SAM the software animated mouth).

(-B.D.) See Gallery, Issue #3

## Quink

CBS Software  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

Each screen presents the player with 8 random places, names, or things: some items will belong together by some associating element, while the rest will be totally unrelated. Sort it out as fast as you can for maximum points.

(-B.D.) See Gallery, Issue #7

## The Trivia Arcade

Screenplay  
\$ 34.95 Diskette \*\*\*\*\*  
for: C64

3500 questions in 5 categories (additional question pack available for \$9.95). Interesting arcade screen idea for choosing question categories. Up to 4 players.

(-B.D.)

## Up for Grabs

Spinnaker  
\$ 34.95 Diskette \*\*\*\*\*  
for: C64

Fun crossword-type puzzle for up to four players of various ages and skills with joysticks or paddles. Good graphics.

(-B.D.)

## Pathwords

CBS Software  
\$ :na Diskette \*\*\*\*\*  
for: C64

An interesting variation to those word games you see on paper, where you have to find the hidden words from a solid mass of letters, and draw a circle around them. But this version allows for any continuous path of letters (twists & turns allowed).

(-B.D.) See Gallery, Issue #6

## Perplexity

Daybreak Software  
\$ 29.95 Diskette \*\*\*\*\*  
for: C64

A series of classic thinking puzzles. The best of which is 'Electro-connection' which has you trying to route wiring across the screen without crossing over yourself (like circuit design).

(-B.D.) See Gallery, Issue #3

## Flower Power

Softwave  
\$ 19.95 Diskette \*\*\*  
for: C64

While working on your various areas of math, you will be growing a colorful garden of flowers, while wrong answers grow weeds. Works with addition, subtraction, multiplication and division.

(-B.D.) See Gallery, Issue #3

## Fraction Fever

Spinnaker  
\$ 34.95 Diskette \*\*\*  
for: C64

We're not convinced that this program helps kids learn fractions, (the visual scheme is fairly confusing in terms numbers), but they will probably have fun bouncing along on their pogo-sticks, riding up elevators, and falling thru the gaps. Edu-game...ok, but not one of Spinnaker's best.

(-B.D.) See Gallery, Issue #3

## The Pond

Sunburst Communications  
\$ :na Diskette \*\*\*-  
for: C64

After titles like The Factory and Missing Links, this one is a disappointment. The Pond is a tedious problem solving exercise wherein the player must find a pattern that will enable a frog to cross a pond on a pathway of lilly-pads.

(-B.D.) See Gallery, Issue #7

## A.B. Choo Choo

Boston Educational  
\$ 24.95 Diskette  
for: C64

Students are drilled in letter recognition, alphabet sequencing, and sight word recognition in this 3 part program featuring oversized letters in a train/truck theme. Preschool to K.

## Bank Street Story Book

MindScape  
\$ 39.95 Diskette  
for: C64

Children can create dynamic multiple-paged stories with animation and sequencing. Stories may be saved to disk or printed out to make books.

## Bible Fun 1

Smokey Mountain Software  
\$ 49.95 Diskette  
for: C64

Seven complete, unabridged programs of Bible knowledge. For ages 8 and up.

## Build a Book about You

Scarborough Systems  
\$ 39.95 Diskette  
for: C64

Create a personalized childrens book.

## Castle Clobber

MindScape  
\$ 24.95 Diskette  
for: C64

As children pilot 'Tonk' around the castle, they strengthen their logic, critical thinking and map reading skills. Colorful graphics, lively animation and original music. For ages 4 to 18.



### Cave of the Word Wizard

Timeworks  
\$ 24.95 Diskette  
for: C64

Develops spelling skills by combining arcade action and speech in this spelling game with 500 spoken words on 10 skill levels and 4 game levels.

### Challenge Math

Sunburst Communications  
\$ 44.95 Diskette  
for: C64

An alien space intruder, a dinosaur and a mysterious mansion entice students into practicing basic arithmetic operations.

### Choice of Hercules

SocrateSystems  
\$ 19.95 Disk or Tape  
for: C64 C128

Multiple choice screen game with color, sound, help, and score keeping. Sample files are included with an editor to construct your own. False answers are made up by the teacher or computer, and randomized for each game. Each SocrateSystems program can be purchased separately, but still use the same files.

### CodeWriter Specialty DBMS's

CodeWriter  
\$ 19.99 Diskette  
for: C64

Specialized data base managers of all sorts, for 19.99 each. Includes BillBusters, Coin Collector, Scout Records, Appointment Planner/Weekly Schedule, Auto Maintenance, Mailing List, School Report Card System, Album Library, Book Library, and Real Estate Records.

### Crossword Magic

MindScape  
\$ 49.95 Diskette  
for: C64

Create your own crossword puzzles including clues. A unique way to study any language or subject.

### Donald Duck's Playground

Sierra On-Line  
\$ 34.95 Diskette  
for: C64

Teaches children ages 7 to 11 about money: counting cash, making change, paying for purchases, keeping track of their assets and most importantly teaches them the relationship among work, wages and possessions.

### Dr. Suess Fix-up the Mix-up

CBS Software  
\$ 29.95 Diskette  
for: C64

Electronic jigsaw puzzle that features favorite Dr. Suess storybook characters. Increases your child's problem solving, concentration, pattern recognition and memory skills. For ages 4 to 10.

### Educational Game Pack

Nanosec  
\$ 34.95 Diskette  
for: C64

Two edu-games for understanding weather (Tornado Tim) and learning math (Math Farm).

### Fruit Tree / Gumball

Boston Educational  
\$ 24.95 Disk or Tape  
for: C64

Two games are contained within this program to drill counting and simple addition and subtraction. For grades preschool to second grade.

### Getting Ready to Read & Add

Sunburst Communications  
\$ 44.95 Diskette  
for: C64

Sound, color and animation help young students identify and match shapes, upper/lower case letters and numbers.

### Ginger the Cat

Cardinal Software  
\$ 34.95 Diskette  
for: C64

Music, bright colors and movement create a happy environment in which your children learn basic skills in: colors, letters, numbers, shapes and simple arithmetic. For ages from 2 to 6.

### Halley Project

MindScape  
\$ 39.95 Diskette  
for: C64

Players must successfully complete a series of missions, navigating by the stars, in this authentic real-time simulation of the solar system. Qualifiers may participate in a special secret mission.

### Hemlock

SocrateSystems  
\$ 19.95 Disk or Tape  
for: C64 C128

Hangman type screen game with an important difference: something beyond the alphabet is learned. A question is displayed and the player has to guess the answer, with the number of tries set in advance. It includes sound, color, graphics, score recording, and uses files made up for any SocrateSystems program. For elementary thru high school.

### Incredible Laboratory

Sunburst Communications  
\$ 44.95 Diskette  
for: C64

Students learn problem solving skills as they mix 'crazy chemicals' to produce colorfully vivid monsters.

### Just Imagine

Commodore  
\$ :na Diskette  
for: C64

Unique educational program that lets your child design imaginative stories increasing their word to image association, creative writing and simple word processing. Includes 9 background scenes, 25 animated characters, and 48 stationary objects.

### Keyboard Cadet

MindScape  
\$ 39.95 Diskette  
for: C64

Trains users to type on the computer keyboard, excellent graphics and ease of use make it appropriate for users age 8 and up.

### Kid Pro Quo

SoftSync  
\$ 29.95 Diskette  
for: C64 C128

Kids can write text, draw, paint and animate pictures and even compose music. There's also a built-in picture and music libraries. Great for picture books, comic strips, illustrated reports, cartoons, newspapers. Offers a child a creative environment that encourages writing, drawing, music, computer skills and lots of fun.



### Leaps and Bounds

Muse Software  
\$ 39.95 Diskette  
for: C64

Develops reading skills, basic letter/word recognition, numbers and counting skills. Ages 4 to 8, reading not required, because pictures guide the child through the program.

### Long Division

Infinity Software  
\$ 25.00 Diskette  
for: C64

A program that teaches long division fundamentals and monitors student performance with positive feedback. A random number generator assures varied problems. 3 skill levels.

### Missing Links

Sunburst Communications  
\$ 44.95 Diskette  
for: C64

Passages from nine classics of children's literature and solutions depend on the student's educated guess.

### Management Decision

Infinity Software  
\$ 25.00 Diskette  
for: C64

Educational simulation that tests the player's ability to develop and operate a new company. Over the next 18 months, you will be the president and in the position to guide your company to profit and success or lose your shirt. Regardless of the outcome, you will come to understand the relationships and trade-offs to make a profit.

### MasterType New & Improved

Scarborough Systems  
\$ 39.95 Disk or ROM  
for: C64

Learn to type or get blown to bits in this typing instruction edu-game.  
(-Staff)

### Math Action Games Series

MindScape  
\$ 19.95 Diskette  
for: C64

Teaches children in grades K-3 number and counting, teaches multiplication and division for grades 3-6 and for grades 6-8 it teaches percentages, decimals and fractions.

### Math Bowl

Micrograms  
\$ 15.95 Diskette  
for: C64

Grades 4 - 5. Edu-game for mathematics with a bowling scenario.

### Math Double Drill

Cardinal Software  
\$ 34.95 Diskette  
for: C64

Colorful animation and snappy tunes turn learning math facts into an exciting challenge. Contains 2 games both of which can be set for the individual's ability. Covers addition, subtraction, multiplication and division. Includes: timer, tutor mode, switchable on/off sound for wrong answers. Grades K-6.

### Memory Castle

Sunburst Communications  
\$ 44.95 Diskette  
for: C64

Gives students practice in remembering and following directions.

### Monkeymath

Artworx Software  
\$ 24.95 Disk or Tape  
for: C64

Graphics and animation couples the fun and excitement of an arcade game with the opportunity to learn. Children ages 6-12 can practice number placement, addition, subtraction, multiplication, and division. Three levels of difficulty.

### Mr. Pixels Cartoon Kit

MindScape  
\$ 29.95 Diskette  
for: C64

Allows children to explore their creativity by selecting or building cartoon characters and then combining them into unique cartoon features. Works with other Mr. Pixel programs.

### Mr. Pixels Game Maker

MindScape  
\$ 29.95 Diskette  
for: C64

Allows children 9 and older to create their own arcade games using 'if/then' statements for rules and adding predrawn or original characters and backgrounds (like those created from 'Paint Set' or 'Cartoon Maker').

### Mr. Pixels Paint Set

MindScape  
\$ 29.95 Diskette  
for: C64

Teaches children 8 and older an intuitive understanding of programming while they explore their creativity. Drawing in full color or change other drawings. Works with other Mr. Pixel programs.

### Rainy Day Fun

Thorn EMI  
\$ 39.95 Diskette  
for: C64

Ten creative activities that include: Connect-the-dots, Mask-maker, Sliding puzzles, Banner maker, Fortune Teller, Mouse Maze, and Coloring Book.

### Scrambled Verses

Smokey Mountain Software  
\$ 29.95 Diskette  
for: C64

Your task is to recognize the proper order of each line in a multi-line Bible selection and organize them correctly. For home or Bible study use. Ages 8 and up.

### Scramble

Greenwood Software  
\$ 20.00 Diskette  
for: C64

Word game that scrambles the letters of words so you can unscramble them.

### Sea Voyagers

CBS Software  
\$ 39.95 Diskette  
for: C64

For ages 8 to adult. An electronic learning game which chronicles the lives and historic discoveries of 30 New World explorers from Balboa to Vespucci.



### Shape Games

Boston Educational  
\$ 24.95 Disk or Tape  
for: C64

Patterns and basic shape recognition are drilled in this two game program. Audio rewards are given for correct answers. Preschool to second grade.

### Show Director

MindScape  
\$ 29.95 Diskette  
for: C64

Children can direct their own animated productions. They write a script, then select a predrawn character and background. Add sound and music to complete the show.

### Socratic Quiz

SocrateSystems  
\$ 19.95 Disk or Tape  
for: C64 C128

Question/answer screen game with color, sound, help, and score keeping. Sample files are included with an editor to construct your own. For classroom or homestudy, Jr high to college, depending on file complexity. Uses any of the other SocrateSystems files.

>>>> Circle Reader Service No. 37 <<<<

### Sort'em Series 1 & 2

Smoky Mountain Software  
\$ 24.95 Diskette  
for: C64

Series of programs to teach preschoolers and elementary age children Bible history and sequencing skills. \$24.95 each.

### Spell That Word!

Micrograms  
\$ 15.95 Diskette  
for: C64

Grades 3 - 6. Game show format allows 2 students to spell words that have been flashed on the screen.

### Spelling Tutor

Midwest Software  
\$ 39.50 Diskette  
for: C64

Complete spelling package comprised of a teacher's utility program, two drill games for students and a data disk containing 4289 words from 4 major spelling lists.

### Teasers by Tobbs

Sunburst Communications  
\$ 44.95 Diskette  
for: C64

Motivates students to think logically to solve addition and multiplication problems in number-puzzle grids.

### Tink's Adventure

MindScape  
\$ 24.95 Diskette  
for: C64

Children's illustrator and author, Mercer Mayer, designed this for children to learn ABCs and to become familiar with the keyboard.

### Tink's Subtraction Fair

MindScape  
\$ 24.95 Diskette  
for: C64

Children learn principles of earning and spending as they visit the fair with Tink. Mathematical memory and concentration skills are developed thru the 5 levels. For ages 4 to 8.

### Tinka's Mazes

MindScape  
\$ 24.95 Diskette  
for: C64

Innovative way for children to learn counting and develop basic math concepts.

### Tonk in the Land of BuddyBots

MindScape  
\$ 24.95 Diskette  
for: C64

Children learn visual discrimination by distinguishing shapes and patterns and develop concentration and memory skills as well.

### Tuk Goes to Town

MindScape  
\$ 24.95 Diskette  
for: C64

Children become part of this graphic/text adventure as they choose Tuk's vehicle and places thru which he should travel. Develops the child's vocabulary and strengthens his spelling.

### Welcome Aboard

Broderbund  
\$ :na Diskette  
for: C64

Based on a cruise ship theme with Jim Henson's Muppet characters leading you through the world of computers (from BASIC to DBMS to word-processing to E-mail and games) on the S.S. MicroShip. Available 2nd half of 1985.

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### Word Party

Michael Crick  
\$ 14.95 Diskette  
for: C64

Word search game for families, parties or the classroom. Word Party (previously published by UMI and K-Tell under as 'Word Feud') is now being published in English, Spanish, French, German, and Esoteric. As a party game it requires secret signals, bluffing, deception, as well as work skills and quick reflexes.



## Word Zapper I

Micrograms  
\$ 27.95 Diskette  
for: C64

Grades 3 - 5. Game show format where you must zap incorrectly spelled words.

## MISCELLANEOUS RECREATIONAL

INFO

If it's fun and you  
can't find it listed  
anywhere else, we  
probably stuck it  
here!

## Pinball Construction Set

Electronic Arts  
\$ 39.95 Diskette \*\*\*\*\*  
for: C64

INFO=64's choice for best recreational software of 1983. Much more than a game. You can build almost any pinball game you can imagine using a super parts box of components, then go to a screen that lets you control gravity, rebound strength etc. and save them to disk. Many pre-designed pinball machines as well.

(-B.D.) See Gallery, Issue #3

## Sky Travel

Commodore  
\$ :na Diskette \*\*\*\*\*  
for: C64

Commodore has done it again with an educational and fun masterpiece. This electronic planetarium displays more than 1200 stars and 88 constellations in their proper positions over a 10,000 year period. Printer dumps and more. A must buy!

(-B.D.) See Gallery, Issue #7

## 64 Collection (#1 - #15)

Public Domain  
\$ 10.00 Disk or Tape \*\*\*+  
for: C64

An excellent value with at least 25 assorted programs (games, utilities, education) per disk or tape. Better stuff than many 'budget' software company titles.

(-B.D.)

## Trivia Fever

Professional Software  
\$ :na Diskette \*\*\*+  
for: C64

If you're not near 'trivia overdose', then this belongs with the rest of your collection. Notable in that it can be played with or sans computer, and offers numerous handicapping features to insure a fair and interesting game.

(-B.D.) See Gallery, Issue #6

## Eliza

Artificial Intelligence  
\$ 45.00 Disk or Tape \*\*\*  
for: C64 C128

A full implementation of the classic artificial intelligence program written at MIT in 1966. Eliza is a Rogerian Psychotherapist who responds to questions or statements typed in by the user. Eliza's remarks are often surprisingly appropriate. Written in BASIC, this program is easily modified for those interested.

(-Staff)

## 1984 Contest C64

Public Domain  
\$ 10.00 Disk or Tape  
for: C64

This collection was assembled from the contest entries that Public Domain, Inc. received from their 1984 programmers contest. Covers a wide range of applications.

(-Staff)

## Cryptologic

Lawco  
\$ 19.95 Diskette  
for: C64

A set of 2 puzzles that require logic to solve.

## Science Fiction Trivia

Infinity Software  
\$ 25.00 Diskette  
for: C64

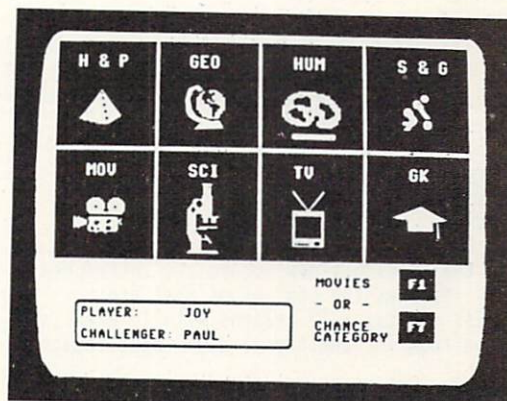
For all you loyal fans of the Outer Space Classics (Star Wars, Star Trek, etc.). Trivia game for 1 to 4 players or teams can compete against the clock to answer multiple choice questions about the last 25 years' sci-fi movie and tv shows. Includes on-screen scoring, timer, pause, and hi-res graphics of your favorite sci-fi scenes.

)))) Circle Reader Service No. 36 <<<<

## Trivia 64

Artworx Software  
\$ 19.95 Diskette  
for: C64

For 2 to 4 players or teams. Joystick controlled, just press the fire button for one of 2100 questions and press again for the answer. Colorful graphics and challenging questions.



## Trivia Plus

Academy Software  
\$ 24.95 Diskette  
for: C64

Takes full advantage of the C64's graphics and sound with over 3,500 questions (as well as 100+ musical selections played on the C64 and you must identify). Also includes an unique 'challenge' mode. No typing required, joystick operated with T/F or multiple choice. for 1 to 6 players.



## GENERAL EDUCATIONAL

INFO

The computer as a teaching aid. From arithmetic to zoology your computer can help you to learn.

### Guitar Master

Mastersoft

\$ 1na

Diskette

\*\*\*

for: C64

Part entry level instruction, part advanced theory and programmed in BASIC, Guitar Master is more reference material than a teacher. Lessons are sketchy and theory oriented. Fattened with redundancy. (-B.D.)

### Animal Stories

Micrograms

\$ 27.90

Diskette

for: C64

Grades 2 - 6. Contains 12 stories for remedial readers. Covers literal and interpretive comprehension, sequencing and recognizing the main idea.

### Basic Facts Fun

Micrograms

\$ 27.95

Disk or Tape

for: C64

Grades 3 - 5. Programs to help teach 2-digit add/subtraction and multiplication and division.

### Big Birds Funhouse

CBS Software

\$ 39.95

Diskette

for: C64

For children ages 3 - 6. Allows children to develop visual/auditory match and discrimination abilities as well as counting and memorization. Includes keyboard overlay.

### Biology

American Educational Computer

\$ 19.95

Diskette

for: C64 C128

Teaches the difficult new vocabulary introduced in biology. Matches the content of most biology textbooks. Contains 35 lessons with 10 exercises each, and room for additional user input lessons.

### CCI Super Word Find

Clockwork Computers

\$ 19.95

Disk or Tape

for: C64

For teachers and cross-word enthusiasts to achieve an educational objective or just for entertainment. Program consists of user specification of list of words (from 2 to 50), print out options, answer key, and the puzzle itself (10x10 to 40x25).

Section number 4



Here is one way to draw the structure of a sugar. Remember, a sugar is a simple carbohydrate. Notice, that although there are H and OH units on each side of the chain, they are not directly connected. On one end of the molecule, is the -CHO or aldehyde group.

### Biology Series

American Peripherals

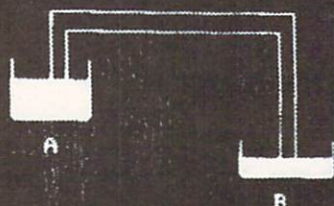
\$ 525.00

Diskette

for: C64

Sequential series that covers an entire high school course in biology, topic by topic. Consists of mini-lessons that introduce, develop and quiz you in biology (explanations are given for incorrect answers). Contains 72 programs.

1  
Imagine a siphon connecting a beaker of water to an empty beaker.



The water moves from the higher to lower position. Nature proceeds from the higher energy state to the lower energy state.

### Chemistry Series

American Peripherals

\$ 340.00

Diskette

for: C64

Sequential series that covers an entire high school course in chemistry. Each program consists of a series of mini-lessons. As new topics are introduced and developed, the student is then questioned and explanations are given for incorrect answers. The entire set contains 43 programs on disks.



## EasySign

Nufekop  
\$ 19.95 Diskette  
for: C64

A tutoring program designed to help any age person to learn the hand sign alphabet. Hi-res pictures of hands forming the alphabet.

## Figuring with Fractions I

Micrograms  
\$ 55.95 Diskette  
for: C64

Grades 5 - 7. Programs covering mathematics with fractions.

## French

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Teaches English to French translation. Reinforces syntax and knowledge of French idioms. Includes 98% of the vocabulary in most French textbooks. Contains 35 lessons with 10 exercise each, and room for additional user input lessons.

## Friendly Figures

Micrograms  
\$ 41.85 Diskette  
for: C64

Grades 1 - 2. Programs to help young children learn about counting and simple addition and subtraction.

## Grammar

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Sharpens and reinforces English grammar and usage. Tackles such areas as lay/lie, who/whom, and more. Contains 35 lessons with 10 exercises each and room for additional user input lessons. Grades 4-6.

## Health and Safety

Micrograms  
\$ 67.95 Disk or Tape  
for: C64

Grades 3 - 6. Programs that contain information concerning bicycle safety, health and first aid areas.

## Hodge Podge

Artworx Software  
\$ 19.95 Diskette  
for: C64

Provides knowledge in a most enjoyable and non-intimidating fashion for children from 18 months to 6 years of age. Consists of many cartoons, animations and songs.

## Learn to Read

American Educational Computer  
\$ 39.95 Diskette  
for: C64 C128

Teaches the structure of words to ensure success in reading. Such topics as prefixes, suffixes, contractions, synonyms, homonyms, antonyms, etc., are among the structural skills included in the program. For grades 1-4.

## Learning Numbers

Micrograms  
\$ 41.95 Disk or Tape  
for: C64

Grades K - 1. Programs to help young children develop an understanding of counting numbers.

## Linkword

Artworx Software  
\$ 24.95 Diskette  
for: C64

Learn a vocabulary (available in Spanish, Italian, German or French) of about 400 words, basic grammar, and pronunciation in 10 hours. Each package includes an audio tape so you can hear the correct pronunciation of new words.

## Match Master

Micrograms  
\$ 69.95 Disk or Tape  
for: C64

Grades 5 - 8. Students are given a 3 minute time limit in which to match the names of famous people to notable accomplishments.

## MicroMouse

Greenwood Software  
\$ 20.00 Diskette  
for: C64

Programming environment which enables anyone to discover computer programming.

## Monkeybuilder

Artworx Software  
\$ 24.95 Disk or Tape  
for: C64

Colorful animated program is designed to increase spelling and word analysis skills for children ages 7-12. The monkey is directed by the child to catch the various word parts with his net and place them on the lift. 17 different levels.

## Monkeynews

Artworx Software  
\$ 24.95 Disk or Tape  
for: C64

Innovative reading comprehension program, for children ages 7-12. Allows for active participation in selection of story direction, answering questions, finding and replacing missing words and even typing headlines for the story.

## Movie Musical Madness

CBS Software  
\$ 39.95 Diskette  
for: C64

Makes you the director, producer, writer and composer of your own Hollywood movie musicals.

## Mr. Readwell - Primary

Micrograms  
\$ 41.85 Disk or Tape  
for: C64

Grades 1st - 3rd. Child selects story and reading speed, then after each page of reading, the child is asked questions over the reading. Intermediate version available for grades 3 - 6.

## My Book

Boston Educational  
\$ 34.95 Diskette  
for: C64

Students create their own stories, including pictures and text, with this creative writing tool. Using a joystick, they select from the 6 menu options, like adding captions to their favorite pictures, also read, save, & print. Preschool to second grade.



## Number Patterns

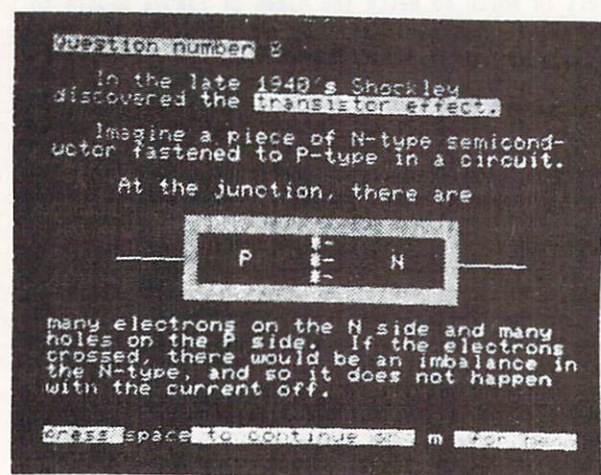
Micrograms  
\$ 27.95 Diskette  
for: C64

Grades 1 - 2. Programs to help young children develop an understanding of even and odd numbers, and sequencing numbers.

## Phonics

American Educational Computer  
\$ 39.95 Diskette  
for: C64 C128

Begins with phonics, the building blocks of reading skills, introduces the sounds of vowels and consonants in reading: short vowels, long vowels and initial consonants. For grades k-3.



## Physics Series

American Peripherals  
\$ 475.00 Diskette  
for: C64

Covers an entire high school course in physics, topic by topic. Each program consists of a series of mini-lessons. As new topics are introduced and developed, the student is given 'mastery' questions, and explanations are given for incorrect answers. Contains 64 programs.

## Picture Phonics

Micrograms  
\$ 41.85 Diskette  
for: C64

Grades preschool to 1st. Over 100 colorful and easily recognizable pictures along with large easy to read lower case letters.

## Primary Language Skills

Micrograms  
\$ 41.95 Diskette  
for: C64

Grades 2 - 3. Program covering punctuation, capitalization and grammar.

## Professor Snead

Micrograms  
\$ 41.95 Disk or Tape  
for: C64

Grades 5 - 7. Contains 6 stories and after each reading page, the reader is asked comprehension questions over the reading.

## Reading Comprehension

American Educational Computer  
\$ 39.95 Diskette  
for: C64 C128

Improves reading comprehension by working with finding main ideas, cause and effect, similarity and differences, predicting outcomes, differentiating between fact and opinion, etc. Grades 1-8.

## Reading Graphs

Micrograms  
\$ 15.95 Diskette  
for: C64

Grades 4 - 6. Pictographs, bar, double bar, and line graphs are introduced.

## Reading Readiness

Micrograms  
\$ 41.85 Diskette  
for: C64

Grades preschool to 1st. Many programs on one disk to teach letters of the alphabet.

## Reading Series (Grades 3-6)

American Peripherals  
\$ 99.00 Diskette  
for: C64

Each grade is a series of 15 lessons, close style reading passages and their associated questions.

## RomperRoom: I love my alphabet

First Star  
\$ 29.95 Diskette  
for: C64

2-5 year olds learn actions and feeling through 4 different learning techniques.

## SAT Perfect Score

MindScape  
\$ 69.95 Diskette  
for: C64

Allows users to study all sections of the SAT with material presented on 6 double sided disks. Teaches students good test-taking techniques. Includes timed tests.

## Science

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Three separate programs which cover life, earth/space, and physical sciences. Can be used in conjunction with elementary science programs. Contains 35 lessons with 10 exercises each, and room for additional user input lessons. Grades 3-4, 5-6, 7-8.

## Sequencing Sam -Primary

Micrograms  
\$ 41.85 Disk or Tape  
for: C64

Grades 1st - 3rd. Child selects story and reading speed, then after each page of reading, the child is asked to sequence story events. Intermediate version available for grades 3 - 6.

## Sharing Science I

Micrograms  
\$ 41.95 Disk or Tape  
for: C64

Grades 2 - 5. Programs that contain information concerning basic concepts in 6 or 7 science curriculum areas. Also available version II for grades 6 - 8.



## Spanish

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Teaches English to Spanish translation. Reinforces syntax and knowledge of Spanish idioms. Includes 98% of the vocabulary in most Spanish textbooks. Contains 35 lessons with 10 exercises each, and room for additional user input lessons.

## Speed Math

Micrograms  
\$ 27.95 Disk or Tape  
for: C64

Grades 3 - 5. Programs to help teach basic multiplication facts with an emphasis on rapid responses.

## Spelling

American Educational Computer  
\$ 39.95 Diskette  
for: C64 C128

Uses 'test-teach-test' approach to teach the spelling of 4,233 words most often used in writing. Incorrectly spelled words are added to 'words to study' list and are deleted when correctly spelled during post-testing. For 3 users, grades 2-8.

## States and Capitals

Micrograms  
\$ 15.95 Diskette  
for: C64

Grades 4 - 6. Hi-res outline map of the U.S. and students may name states &/or capitals.

## Stickybear

Weekly Reader Software  
\$ :na Diskette  
for: C64

Easy to use educational program that also fun. For ages 5 - 10.

## Study Skills I

Micrograms  
\$ 27.95 Diskette  
for: C64

Grades 3 - 4. Contains 2 programs 'Alphabetical Order' and 'Guide Words' which concentrate on alphabetizing skills.

## The Professor

Progressive Peripherals  
\$ 34.95 Diskette  
for: C64

An in-depth self tutorial for the C64 on a two sided disk. Menu driven and covers BASIC, sound, music, graphics and quizzes your comprehension.

## U.S. Adventure

First Star  
\$ 29.95 Diskette  
for: C64

Teaches geography, history and trivia of the USA.

## U.S. Geography

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Teaches facts and information about our states, cities, landmarks, lands, waterways, and climates. Lessons are broken into geographical regions such as Mid-West, Pacific, etc. Contains 35 lessons with 10 exercises each, and room for additional user input lessons. Grades 5 and up.

## U.S. Government

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Reviews the U.S. constitution, structure of federal, state and local government, policies and important laws. Contains 35 lessons with 10 exercises each, and room for extra user input lessons.

## U.S. History

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Designed to supplement an introductory course. It teaches important dates, facts, and events in U.S. history. Contains 35 lessons with 10 exercises each, and room for extra user input lessons.

## Vocabulary Crosswords I

Micrograms  
\$ 41.95 Disk or Tape  
for: C64

Grades 3 - 5. Crossword puzzle format is used to help students strengthen their vocabularies.

## Vocabulary

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Helps the user increase his or her vocabulary by working with synonyms, antonyms, homonyms, etc. Contains 35 lessons with 10 exercises each. There is room for the user to put in additional lessons. Grades 4-6.

## World Geography

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Teaches facts and information about continents, countries, capitals, cities, waterways and oceans. Contains 35 lessons with 10 exercises each, and room for extra user input lessons. Grades 8 and up.

## World History

American Educational Computer  
\$ 19.95 Diskette  
for: C64 C128

Designed to supplement an introductory course. It teaches important dates, facts, and events in world history. Contains 35 lessons with 10 exercises each, and room for extra user input lessons.

## ADVANCED EDUCATIONAL



Statistics, calculus,  
electronics, and  
other tough subjects  
soften up with a  
little software aid.

## C-64 Curve-Fitting

Nth Digit Solutions  
\$ 29.95 Diskette  
for: C64

Fits the user's data to over 20 different mathematical curve types and selects those which best fit the input data. The curves can then be used to make projections based on the data, and to express the data mathematically in the users own programs.



## Chessmate

Cardinal Software  
\$ 29.95 Diskette  
for: C64

Not a 'computer plays you' program, but a powerful learning tool that allows you to analyze, master, bookgames, open, save and print games. 'Chess Movie' mode lets you step through any entered or saved game. Has single stroke commands to memorize any board position and recall it after playing through each variation.

## College Pak

Useful Software  
\$ 25.00 Diskette  
for: C64

20 plus college level programs teaching: math, chemistry, medicine, psychology, finance etc.

FREQUENCY	AMPLITUDE	PHASE
800 hz	- 12.23 db	89.4 deg
825 hz	- 11.05 db	89.3 deg
850 hz	- 9.75 db	89.2 deg
875 hz	- 8.27 db	89.1 deg
900 hz	- 6.56 db	88.9 deg
925 hz	- 4.49 db	88.6 deg
950 hz	- 1.87 db	88.1 deg
975 hz	- 1.77 db	87.1 deg
1000 hz	- 7.90 db	84.0 deg
1025 hz	27.55 db	- 3.8 deg
1050 hz	7.99 db	- 84.0 deg
1075 hz	2.14 db	- 86.9 deg
1100 hz	- 1.27 db	- 87.9 deg
1125 hz	- 3.67 db	- 88.4 deg
1150 hz	- 5.51 db	- 88.7 deg
1175 hz	- 7.01 db	- 88.9 deg
1200 hz	- 8.26 db	- 89.1 deg

Another frequency sweep? (y/n)

## Electronic Circuit Analysis

Nth Digit Solutions  
\$ 29.95 Diskette  
for: C64

Includes two programs to analyze the frequency and phase output of most any electronic circuit. Analyzes ladder circuits of up to 200 components, and user specified circuits of up to 40 components and 25 component junctions. Allows resistors, capacitors, inductors, NPN and FET transistors, op-amps and transformers. Output to screen or printer.

## Electronic Design Utilities

Nth Digit Solutions  
\$ 19.95 Diskette  
for: C64

Menu driven collection of 13 programs to design active and passive filters and to solve numerous electronic design problems including: resonance, Ohm's Law, decibel conversions, attenuators, etc.

## Excel-A-Read

American Educational Computer  
\$ 49.95 Diskette  
for: C64 C128

Designed to increase the users reading rate while maintaining and improving reading comprehension. Improves left-to-right and top-to-bottom page eye movements, scanning and highlighting skills. Contains 60 reading selections of a wide interest. Grades 5-adult.

## TEACHING AND ADMINISTRATION



Administrators and teachers have an overwhelming amount of paperwork to do. Now they've got help.

## Attendance Master

Melcher Software  
\$ 39.95 Diskette  
for: C64

Stores complete attendance info for up to 39 students per class for an entire semester. Unlimited classes and user friendly.

## Basketball Stats

Midwest Software  
\$ 35.00 Diskette  
for: C64

Provides statistical analysis for a roster of 18 players for a 30 game season.

## Bingo Printer

SocrateSystems  
\$ 19.95 Disk or Tape  
for: C64 C128

Prints BINGO cards and a call sheet for an entire classroom or any large group, using the same files (vocabulary types work best) used in all the other SocrateSystems programs. Jr high to college, depending on file complexity. Includes editor and sample files.

>>>> Circle Reader Service No. 7 <<<<

## Body Man I

Nanosec  
\$ 34.95 Diskette  
for: C64

First in a series of 3 programs that depict the human body and its associated makeup in fine detail. 50 hi-res screens show all major structures of the human body, demonstrate their purpose with descriptions and quiz the user.

## CompuGrade

Melcher Software  
\$ 29.95 Diskette  
for: C64

Computes average and letter grades. Tests may be weighted in any fashion and any letter scale may be used. Many options like dropping lowest & highest test scores.

## Dictionary

SocrateSystems  
\$ 19.95 Disk or Tape  
for: C64 C128

Transforms your computer into an instant dictionary/glossary for foreign language study, English vocabulary, history or biology terms, etc. For classroom or homestudy use, jr. high to college, depending on file complexity. Includes editor. Each SocrateSystem program is sold separately, but files made up for any other may be used.



## BASIC CLAS

Num	Title
1	INTRODUCTION
2	AUTHORING FORMATS
3	FILL-IN QUESTIONS
4	TRUE/FALSE QUESTIONS
5	MULTIPLE CHOICE Q'ST
6	MATCHING QUESTIONS

Lesson number? █

## CLAS

Touch Technologies  
\$ 89.95 Diskette  
for: C64

Computerized Lesson Authoring System is a tool designed for educators and parents to allow them to create their own courseware. No computer experience is necessary to create a single lesson on a single topic or a whole semester's course. The system includes an author disk, student disk, and a comprehensive user's guide.

## Football Scout

Midwest Software  
\$ 49.50 Diskette  
for: C64

A scouting analysis system which handles up to 250 players on each team scouted. Produces a play list showing down, distance, situation, etc., a tendency list and zone-hash-down-distance reports.

## Genesis 2

Greenwood Software  
\$ 20.00 Disk or Tape  
for: C64

Computer assisted instruction authoring system which allows teachers or parents to create computer exercises in a question/answer format.

## Grade Manager 3

Smokey Mountain Software  
\$ 69.95 Diskette  
for: C64

Grade calculation, management and reporting system. Maintains detailed student, assignment history, absences, tardies, etc.

## Grade Organizer

Cardinal Software  
\$ 39.95 Diskette  
for: C64

Stores names and grades of students in 6 different classes with up to 40 students per class and 680 grades per student. Prints interim and final reports, class name lists and individual grade up-dates at the touch of a button. For teachers of students from intermediate through college.

## Gymnastics

Midwest Software  
\$ 35.00 Diskette  
for: C64

A record keeping and statistical program for male/female gymnastics meets at the high school, college, or club level. Up to 24 contestants per team and 32 teams.

## Master Grades

Midwest Software  
\$ 35.00 Diskette  
for: C64

A simple to use teachers grading program. Works on the points system and keeps cumulative points only, up to 9999 per marking period for up to 200 students in one file.

## Multi Printer

SocrateSystems  
\$ 19.95 Disk or Tape  
for: C64 C128

Prints multiple choice tests from the same master files which work with all other SocrateSystems programs. Sample files are included with an editor to construct your own. For teachers use, elementary to college, depending on question file complexity. Questions and answers are independently randomly generated and a key is printed for each version of each test.

## SPP-Statistics for PCs

Kobetek Systems  
\$ 295.00 Diskette  
for: C64

Menu driven, includes in part: descriptive statistics, cross-tabulation, correlations, linear/quadratic/cubic regressions and multiple regressions, one-way and two-way anova and non-parametric stats. Missing values supported throughout. Data displayed as histograms, scatter plots, normal probability plots, box diagrams and tables. Junior version available for \$75 (US).

Circle Reader Service No. 38 <<<<

## Teachers Aide

Quantum Leap  
\$ 16.00 Diskette  
for: C64

Keeps schedules, stores scores, alphabetize/cross reference students and teachers.

## Teachers Gradebook

American Peripherals  
\$ 24.95 Diskette  
for: C64

This program has been refined over and over to do most of the functions wanted by most teachers. Keeps class lists, grades, automatic-averaging and weighting, optional alphabetized output to disk, printer or screen.

## Test Maker

American Peripherals  
\$ 34.95 Diskette  
for: C64

Teacher enters multiple choice questions and then the choices for answers, computer then produces as many versions of that test as desired to the screen or printer. Flexible and any question may be up to 10 lines long.



## Test Printer

SocrateSystems  
\$ 19.95 Disk or Tape  
for: C64 C128

Prints varied versions of tests or review sheets with keys, using files of questions created for this or any other SocrateSystems program. Includes editor. For classroom or homestudy use, elementary to college, depending on question file complexity.

## TestMaster

Midwest Software  
\$ 35.00 Diskette  
for: C64

Complete test and quiz development system which allows creation of true/false, multiple choice, completion and short answer tests.

## The Test Maker

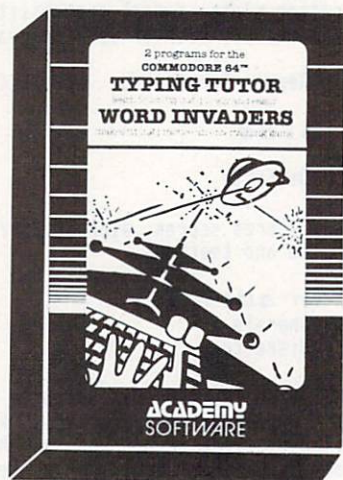
Melcher Software  
\$ 39.95 Diskette  
for: C64

Allows the user to create a data base of multiple choice questions, up to 500 per file with unlimited number of files. Complete documentation and user friendly.

## MISCELLANEOUS SOFTWARE

INFO

If we couldn't figure out what it did, or why, we classified it in this category.



## Typing Tutor + Word Invaders

Academy Software  
\$ 24.95 Disk or Tape \*\*\*\*+  
for: C64

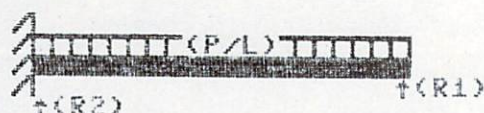
The best typing tutor we have seen yet, it can get your children touch-typing in short order and bring an old hand up to speed. Includes excellent training modules and an arcade-type mode to liven things up and put some pressure on.

(-B.D.)

## 64-BEAM CALC

BEAM COND.

3)



TABLES: 50  
LCINS: 178  
XCINS: 25  
E(PSI): 3000000

?

ENTER NEW E OR HIT ENTER

## 64-Beam Calc

Hartley Software  
\$ 37.50 Diskette \*\*\*  
for: C64

For designers, architects, engineers, students or anyone who wants to quickly and accurately determine the deflection and stresses in a structural beam. User friendly and comes complete with graphics, prompts and function key driven aids (help, stop, main menu, continue), allows for 'what ifs'. Screen or printer outputs.

(-B.D.) See review, Issue #5

>>>> Circle Reader Service No. 4 <<<<

## S.A.M.

Don't Ask Computer Software  
\$ 34.95 Diskette \*\*\*  
for: C64

SAM the Software Activated Mouth has natural (well...) sounding speech, variable pitch, speed, inflection, english text-to-speech conversions, easy to use in programs.

(-B.D.)

## Bartender Guide & Host

After Six Software  
\$ :na Diskette \*\*\*  
for: C64

Contains drink recipes and blood alcohol content computation for social-conscious hosts. Enter your inventory of ingredients and get a list of drinks you can offer to your guests (120 possible). In use, the program is slow, each recipe is loaded after an error free key-in of the name, a menu-selection would be easier and neater.

(-B.D.)

## ABL-64

Input Systems  
\$ 39.95 ROM  
for: C64

Transparent auto boot/load/run cartridge for security, BBS, and other constant use systems.

## Ballistics

Value-Soft  
\$ 39.95 Diskette  
for: C64

For gun reloaders: Check trajectory for popular rifle bullets by weight, caliber, or style. Includes tables for Hornady and Speer bullets, plus others. Standard metro or high-altitude and low temps. Prints out table of trajectory, bullet drop, wind deflection, and more.



### Baseball Handicapping

PDS Sports  
\$ 49.95 Diskette  
for: C64

Includes 'Baseball Statistics' and makes you better prepared to predict the winner of any game, at least mathematically.

### Baseball Statistics

PDS Sports  
\$ 39.95 Diskette  
for: C64

See how opposing baseball teams stack up against each other. See summarizations and performance stats on every team in the major league.

### Basketball Handicapping

PDS Sports  
\$ 49.95 Diskette  
for: C64

Includes 'Basketball Statistics' and gives you an inside look into the outcome of games by mathematically equating statistics, lines and point spreads.

### Basketball Statistics

PDS Sports  
\$ 39.95 Diskette  
for: C64

Comprehensive basketball program that allows you to ask 'what if' into every imaginable comparison and formation.

### Business Researcher

Briley Software  
\$ 60.00 Diskette  
for: C64

Revised Simplex decision-aiding management tool. Only requires basic algebra knowledge and it does the rest to help make profitable decisions with limited supplies.

### C64 Tutor

Comprehensive Software  
\$ 29.95 Disk or Tape  
for: C64

C64 tutorial with screen display editor, sprite editor, music synthesizer, and programmers calculator.

### Cam-64

Input Systems  
\$ 295.00 ROM  
for: C64

Call Accounting manager collects SMDR data from a telephone computer system and organizes it into several different hardcopy formats.

### Christmas Adventure

BitCards  
\$ 16.95 Diskette  
for: C64

Find Santa Claus in his ice castle in this mainly text (converted-from-Apple) adventure with some humor. Customize the program for a gift with the recipient's name and other personal info, that pops up in the middle of the game.

### Clearing House

F/22 Press  
\$ 49.95 Diskette  
for: C64

Identifies bad checks and warns (visually and audibly) users not to cash them. Prints a complete report on each check to screen or the printer.

### Connections

Krell Software  
\$ :na Diskette  
for: C64

Unique program consists of a database of facts. Kids are encouraged to explore the data and formulate their own theories about it, then test their theories back against the database. Teaches logic and the scientific method. Additional databases and a users group are available.

### Control Mode 1

CGRS Microtech  
\$ 125.00 Diskette  
for: C64

Control software for use with Diadacs 1 (see hardware: data acquisition & control section). Allows user to build complex control sequences for home security, energy management, etc.

### Dark Star

F/22 Press  
\$ 64.95 Disk or Tape  
for: C64

Solves all of the exposure and filtration problems normally encountered in the photographic darkroom. Can automatically operate the Omega d5500 enlarger. 'Plus' version (\$89.95 disk) combines both Dark Star and Time Star in one program.

### Distil Simu

Engrsoft  
\$ 36.00 Diskette  
for: C64

Distillation simulator for chemical engineers. Features menu-driven, input error checking, hardcopy to most popular printers, tutorial, stagewise stepoff of stages on McCabe Thiele diagram and VLE curve fit and plot option.

### EMED

DMC Software  
\$ 29.00 Diskette  
for: C64

Electronic Medical Database designed for home use. Contains data on over 460 diseases and 325 symptoms. Many options for the user.

### Energy Manager

Powerline Software  
\$ 59.95 Diskette  
for: C64

Energy analysis program to help control energy cost in homes and buildings, using utility energy bills as a data base it provides a method to maintain vigilance over energy use and measure the effect of energy conservation.

### Eyebrow Lifting Speller

Don Peterson  
\$ 5.00 Diskette  
for: C64

Allows a person who is severely physically handicapped or voiceless or both, to speak with the S.A.M voice synthesizer or type any word in the language with the mere lift of an eyebrow (or any other useable muscle) with an electronic switch mounted on the muscle and connected to the joystick port.

### Football Handicapping

PDS Sports  
\$ 49.95 Diskette  
for: C64

Includes 'Football Statistics' package and forecasts the outcome of football games based on massive amounts of statistical data, morning lines, and point spreads.  
>>>> Circle Reader Service No. 22 <<<<



### Football Predictor

Professor Jones  
\$ 99.95 Diskette  
for: C64 C128

Complete football analysis to predict the outcomes by evaluating the teams statistics.

### Football Team Statistics

PDS Sports  
\$ 39.95 Diskette  
for: C64

Compare teams in over 60 offensive and defensive situations and watch the matchups on the screen. Every team is given a power rating. PDS also provides year-to-date data disks for a nominal charge.

### Gardener's Assistant

Shannon Software  
\$ 29.95 Diskette  
for: C64

Produces vegetable garden layout based on input of garden size, shape, location and vegetables desired.

### GreenMaster Pack

Greenwood Software  
\$ 20.00 Diskette  
for: C64

For the new C64 user, includes a graphics tutorial and a disk utility program.

### Harness Driver Statistics

PDS Sports  
\$ 39.95 Diskette  
for: C64

A complement to the 'Harness Race Handicapping' system that tells you all you need to know about the driver.

### Harness Race Handicapping

PDS Sports  
\$ 129.95 Diskette  
for: C64

The fast and easy way to find out what races and what horses should be looked at. Summarized in a 'power rating' format.

### Hidden Words

Smokey Mountain Software  
\$ 19.95 Diskette  
for: C64

Generates word search puzzles from words you supply.

### Horse ID/Info

Himanne Programs  
\$ 15.00 Diskette  
for: C64

Allows you to keep any general records you want on your horses. You decide what categories of information to use.

### Jockey Statistics

PDS Sports  
\$ 39.95 Diskette  
for: C64

Analyzes all local race horse jockeys and shows you why the top 15 jockeys at local tracks win over 90% of the time.

### Krell Software

Krell Software  
\$ :na Diskette  
for: C64

Various software including SAT, ACT, GMAT, NTE, GRE, TOEFL and MAT preparations, as well as many other educational areas.

### LeagueBowl-40

Briley Software  
\$ 220.00 Diskette  
for: C64

A professional package for secretaries of bowling leagues. Handles up to 42 teams plus subs (about 420 bowlers) per league. Full calculating features and many options. There is also an 'Entry-Level' version available and many utility programs also available for each.

### Limited Gold Edition

Professor Jones  
\$ 299.95 Diskette  
for: C64 C128

Complete racing (thoroughbred, greyhounds, or harness at \$299.95 each) analysis that uses the racing form to predict the finish of each race. Complete documentation and end user support.

### Ltd. Gold Edtn. Thoroughbreds

Professor Jones  
\$ 299.95 Diskette  
for: C64 C128

Complete thoroughbred analysis that uses the racing form to predict the finish of each race. Complete documentation and end user support.

### MasterType Figures & Formulas

Scarborough Systems  
\$ 29.95 Diskette  
for: C64

Learn weights and measures.

### Number Cruncher Stat System

Number Cruncher Stat Systems  
\$ 59.95 Diskette  
for: C64

An integrated, menu-driven statistical system including multiple regression, oneway ANOVA, t-tests, chi-square and more.

### PDI Best of C64 Series

Public Domain  
\$ 10.00 Disk or Tape  
for: C64

Three separate disks for games, utilities, or education for \$10 each. All are loaded with programs.

### PDI Hamfest Special #1

Public Domain  
\$ 10.00 Disk or Tape  
for: C64

A collection of 18 programs for the C64 user who has interest in electronics or ham radios.

### Pedigrees

Himanne Programs  
\$ 15.00 Diskette  
for: C64

Produces a 4 generation pedigree for each animal, using the standard format. Display or screen printouts.

### Phonedial-64

Input Systems  
\$ 21.95 Diskette  
for: C64

Acoustically dials a touch tone phone. Program includes a program for random, or sequential dialing through a selected exchange or dial up your own data list.



## Quarter Horse Handicapping

PDS Sports  
\$ 129.95 Diskette  
for: C64

Assists you in determining which races are payable and which races are not, by playing only those races in which the system indicates a horse having a distinct advantage.

## Right On Programs

Right On Programs  
\$ :na Diskette  
for: C64

Various programs of mainly educational applications.

## RNAV3 Navigator/w

Briley Software  
\$ 29.95 Tape  
for: C64

Flight planner, VOR/DME radio data, 11 western states. Only needs starting and ending points. Also available version for 17 northeast states.

## RoadSearch

Columbia Software  
\$ 34.95 Diskette  
for: C64

Take your next trip with a computer listing showing the best route. Database covering 487 cities and road junctions in the USA and Canada. Also available is 'RoadSearch - Plus' (\$74.95) which in addition you can customize your roadmap with up to 250 towns/road junctions any where in N. America.

## Show Records

Himanme Programs  
\$ 15.00 Diskette  
for: C64

Designed for a more elaborate reordering of show results. Displays name, date, class, placing, number of entries in class, points, judge's name, person showing.

## Statistical Lottery/Lotto

Professor Jones  
\$ 99.95 Diskette  
for: C64 C128

Designed to give the user the ability to track all forms of lottery and lotto past winning numbers and then compile the most probable sets of numbers based on the past.

## STAT

Melcher Software  
\$ 24.95 Diskette  
for: C64

A series of 11 statistical programs for students or professionals. Bar graph generator, binomial frequencies, confidence intervals, and more. Output to screen or printer.

## Thoroughbred Handicapping

PDS Sports  
\$ 129.95 Diskette  
for: C64

Gives you an edge in predicting winners on the horseracing track.

## Time Star

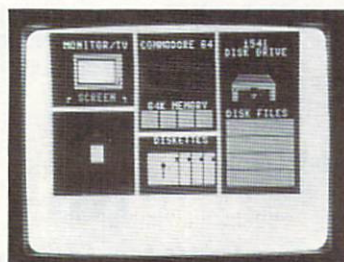
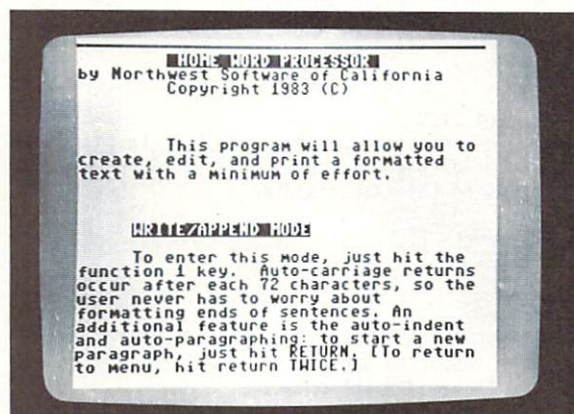
F/22 Press  
\$ 24.95 Disk or Tape  
for: C64

Turns the computer into a powerful sequence timer and allows the user to program as many as 15 sequenced events. Can automatically operate the Omega d5500 enlarger.

## Track Simulator

Professor Jones  
\$ 29.95 Diskette  
for: C64 C128

Professional thoroughbred race track simulation program designed to test your handicapper skills.



## Starter Kit

Kastel Technology  
\$ 19.95 Diskette  
for: C64

Collection of 10 easy to learn programs for the C64. Allows the novice to experiment with word processing, mailing list, graphics, sound, music and games.

## Training Kit

Kastel Technology  
\$ 29.95 Diskette  
for: C64

Teaches a novice computer user how to operate their computer with interactive graphic simulations to lead you through. Covers printer and drive operation, BASIC, graphics, sound and music.



## Trainer Statistics

PDS Sports

\$ 39.95 Diskette  
for: C64

Analyzes all local race horse trainers and gives you a rating for each.

## INTERFACES

INFO

Let your computer talk to third-party printers and other peripherals.

## Easy-Print with Graphics

Progressive Peripherals

\$ 119.95

for: C64

\*\*\*\*\*

Now we're talkin'! Not the cheapest, but easily our favorite printer interface to date. Switches on the outside allow easy configuration for your printer. Steel DIN plug, external reset switch, power cord to joy-port, built-in self-test, extensive manual, utility disk, optional 4k buffer (recommended) greatly enhances speed.

(-B.D.)

## BusCard II

Batteries Included

\$ 199.95

for: C64

\*\*\*\*

Adds BASIC 4.0 commands, IEEE interface, fully compatible with other software, built-in centronics printer port, resident m.l. monitor.

(-B.D.)

## C64-Link

Richvale Telecommunications

\$ 149.95

for: C64

\*\*\*\*

Data transfer between any device and other devices (i.e. serial-parallel, IEEE-serial, parallel-serial, etc.) BASIC 4.0 commands, simple networking of several C64's, m.l. monitor, resident terminal software and CP/M compatibility.

(-B.D.)

## Card/Print +G

Cardco

\$ 79.95

for: C64

\*\*\*\*

Full Commodore character set translation (as well as ASCII values for non-implemented characters). This at the same price that made the old Card/Print A a great value. We don't like the internal dip-switches (you have to completely open the housing), otherwise a pretty good value.

(-B.D.)

## Card/Print B

Cardco

\$ 49.95

for: C64

\*\*\*\*

Enhanced replacement for the old Card/Print A at a much lower price. Features include: new housing (which mounts neatly to the back of the printer instead of hanging out at the end of the cable), 3 micro-switches for locking the printer and interface in various configurations.

(-B.D.)

## Cardette

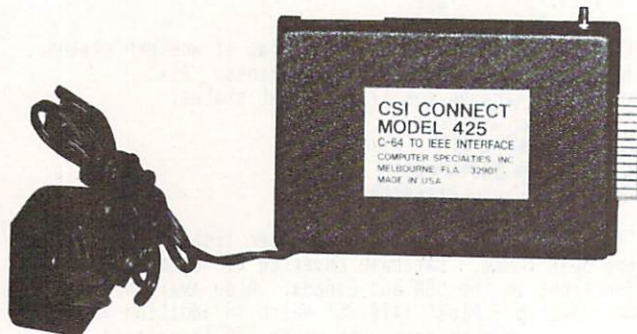
Cardco

\$ 39.95

for: C64

\*\*\*

Interface that allows you to use a non-CBM cassette deck. It seems that the economy type tape decks actually work better with this than the premium decks. (-B.D.)



## CSI Connect IEEE Interface

Computer Specialties

\$ 99.95

for: C64 C128 CP/M

\*\*

A serial to IEEE-488 interface that makes it possible to use the C64 with any standard CBM IEEE-488 device. Interferes with the correct operation of the serial bus with some programs. Currently the only C128 compatible IEEE interface. Try before you buy.

(-M.B.)

>>>> Circle Reader Service No. 14 <<<<

## \$-saver switch

Value-Soft

\$ 29.95

for: C64 C128

Switchable connector allows 2 computers to share one printer, or disk drive. Or, connect two printers of two drives to the same computer.

## ApriCord CD

Apricorn

\$ 69.95

for: C64

Supports printing capabilities of the entire line of Commodore computers and allows parallel graphics printers to emulate CBM printers.

## AutoPrint

The Microperipheral Corp.

\$ 69.95

for: C64 C128

Auto dial/answer 300 baud direct connect modem with internal parallel printer interface. Full duplex in originate or answer, half duplex software selectable. Compatible with most terminal software (Vidtex, VIP, SuperTerm, Smart64) and connects thru the user port. Handshaking feature allows transmission to be suspended until printer is capable of accepting more data.





### CSI-64 Switch Model 1208

Computer Specialties  
\$ 164.95  
for: C64

Allows eight C64s (up to 36 feet away from the Switch) to share a single disk drive and printer. A front panel numeric display indicates the current user.

>>>> Circle Reader Service No. 17 <<<<



### CSI-IE3CENT

Computer Specialties  
\$ 89.95  
for: C64

Allows all Commodore IEEE computers (PET, B128, etc) to output to parallel interface printers. Supports 7 or 8 bits. Works with the Commodore disk and operates using simple BASIC commands and machine language programs as used in word processors.

>>>> Circle Reader Service No. 18 <<<<

### CSI

Peripheral Systems of America  
\$ 39.95  
for: C64 C128

Commodore Serial Interface, has a programmable dip header for easy conversion to interface with a serial printer, modem or RS232 device.

### D'Switch

Lawco  
\$ 89.95 Diskette  
for: C64

Allows the connection of three additional (non serial) peripherals to a Commodore computer.

### E-Link

Progressive Peripherals  
\$ 99.95  
for: C64

Serial to IEEE interface for use with the C64 and IEEE devices like the SFD-1001 disk drive.

### Easy-Link

Progressive Peripherals  
\$ 99.95  
for: C64

Serial interface that's 100% transparent, bi-directional and comes with its own power supply.

### Easy-Print no Graphics

Progressive Peripherals  
\$ 49.95  
for: C64

Like the Easy-Print w/ Graphics but without graphics capabilities.

### Grappler CD

Orange Micro  
\$ 119.95  
for: C64

A respected name in Apple circles. Orange Micro has released a 'Grappler' for the C64. Connects to both the serial and expansion slot (with feed-thru for both) and provides many modes of printer operation.



### Instructor Monitor Prompter

Computer Specialties  
\$ 2250.00  
for: C64 C128 CP/M

Networking device for multi-station applications with the C64. Master unit can monitor and give prompts to any or all 16 slave units. The entire video screen of the slave unit being monitored is displayed at the master's screen at the touch of a key. For schools and dealer training labs.

>>>> Circle Reader Service No. 15 <<<<





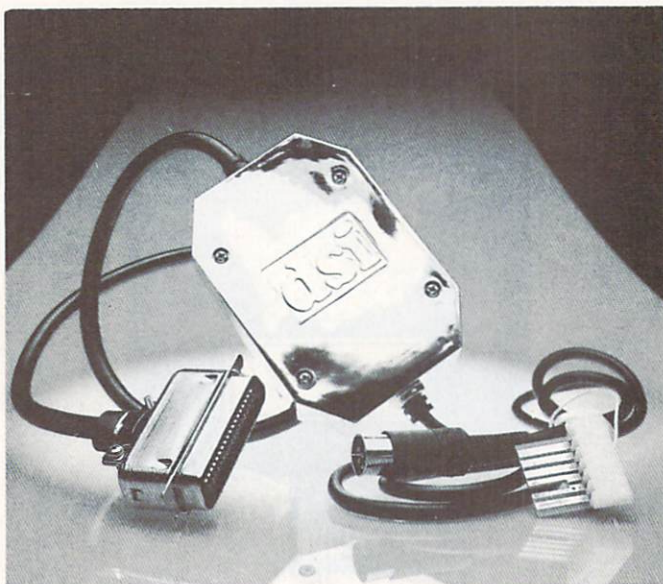
#### Microshare MCS64-8

Comspec

\$ 995.00

for: C64 C128 CP/M

Allows up to 8 users to share disk drives and/or printers. Works with all C64/VIC-20/C128 equipment. Built-in IEEE and VIC/64 serial ports. 100% hardware interfaced, software transparent and no special commands required. Built-in 14k print buffer and disk drive priority.



#### PPI with Graphics Buffer

Data Share

\$ 49.95

for: C64 C128

True Commodore graphics, expanded graphic characters and alphanumeric (reversed for both also), condensed alpha-numerics, total commodore emulation, no dip switches, fully shielded, graphics buffer and Epson compatible.

>>>> Circle Reader Service No. 32 <<<<

#### Microspooler

Consolink

\$ 124

Three printer data buffers of different types and prices ranging from \$139.95 to \$595.

#### Printmaster/+G

Danitronix

\$ 99.95

for: C64

Printer interface with graphics.

#### Printmaster/S

Danitronix

\$ 119.95

for: C64

An advanced RS232 printer interface which connects to the C64 serial port. Selectable 300, 1200, 2400 baud, plus parity, word, and stop bits. Supports CBM graphics on all popular printers.

#### PSA/GPC

Peripherals System of America

\$ 59.95

for: C64 C128

Universal graphic parallel printer interface that is software configurable. 8K buffer and a hi-res ML screen dump are included.

#### Reduce System

Jance Assoc.

\$ 195.00

Disk or Tape

for: C64

Reduction of electrical demand using your C64 with this system. Keeps track of time, date, day of week, month and year. Your use of energy is carefully scheduled to maximize economic use and minimize cost.

#### Shuttle Communicator

The Microperipheral Corp.

\$ 69.95

Diskette

for: C64

Allows the computer to receive information from NDN Softcasts (radio broadcasts) at up to 4800 baud. Terminal software included.

#### Super Graphix

Xetec

\$ 99.95

for: C64 C128 CP/M

Buffered graphics interface with: 8k buffer / 10 print modes / 3 internal screen dumps / reset button / fonts (correspondence font resident, room for 2 additional fonts) / corrected aspect ratios for most printers external DIP switches / internal fonts support super-script, sub-script, underlining, bold-face, and nine different pitches.



### T-Card

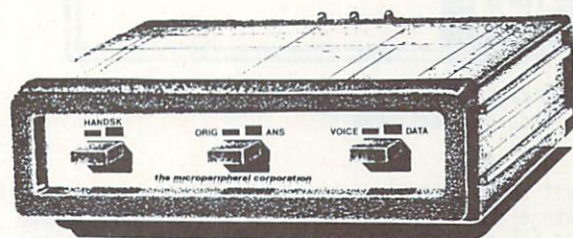
Tecmar  
\$ 400.00  
for: AMIGA

A multi-functional expansion card with up to 1M byte of memory. Features a serial port, clock/calendar with battery backup, hard disk interface, parallel printer port and additional power supply.

### U-Print model C

Digital Devices  
\$ 89.95  
for: C64

universal printer interface that allows standard centronics parallel printers to be connected to the C64, with graphics capabilities and all necessary hardware included.



## TELECOMPUTING (HARDWARE)

INFO

The union of phones  
and computers has the  
potential to change  
the way we work and  
live from now on.

### 1660 Modem/300

Commodore  
\$ 89.95 Diskette \*\*\*\*\*  
for: C64

300 baud, auto answer/dial modem with software that includes a save buffer, up/down loading, function keys, save parameters, 10 different phone number entries, etc. Works with C64, SX-64, as well as the 16 and Plus/4. Includes all the necessary cables, one free hour on and subscription to CompuServe.  
(-Staff)

### 1600 VicModem

Commodore  
\$ 49.95 Diskette \*\*\*\*\*  
for: C64

An economical 300 baud modem with software and direct connect, meaning the handset cord plugs directly into it and you dial on your phone (i.e. no handset-dial or 'trimline' phones).  
(-Staff)

### 1650 Auto-Modem

Commodore  
\$ 89.95 Diskette \*\*\*\*\*  
for: C64

A 300 baud, auto-answer, auto-dial modem. Terminal software (included) allows setting of parameters (parity, duplex, etc.) however it has no save-buffer or up/down loading capabilities. Also, don't plan to use this with your SX-64, since it's wider than the user port that it plugs into and the power-cord prevents this use (3rd party interfaces are available for this problem).  
(-B.D.)

### AutoPrint

The Microperipheral Corp.  
\$ 69.95 Diskette  
for: C64 C128

Auto dial/answer 300 baud direct connect modem with internal parallel printer interface. Full duplex in originate or answer, half duplex software selectable. Compatible with most terminal software (Vidtex, VIP, SuperTerm, Smart64) and connects thru the user port. Handshaking feature allows transmission to be suspended until printer is capable of accepting more data.

### Mitey-Mo

Computer Devices Int'l.  
\$ 119.95 Diskette  
for: C64

300 baud, auto answer/dial modem with programmable function keys, up/down loading, and more.

### MOD300C

Peripherals System of America  
\$ 59.95 Diskette  
for: C64

300 baud modem with auto answer/dial, originate/answer switch, and includes their Q-Term program on disk.

### MPP-1064 Modem

MicroBits Peripherals  
\$ 94.95 Diskette  
for: C64

Complete telecommunications package including 300 baud auto answer/dial modem (direct connect) and V.I.P. software.

### T-Modem

Tecmar  
\$ 600.00  
for: AMIGA

A Hayes compatible modem with selectable 300, 1200, and 2400 bauds. Provides touch tone decoding, off hook detection and interfaces to audio circuits within the AMIGA. Modem fits neatly under a standard phone.



# DATA CONTROL/ ACQUISITION



Hook your computer up  
to the real world.

## Analog Interface Board

Computer Continuum  
\$ 220.00  
for: C64

Fast analog interface board with 8 bits resolution, 8 channels A/D, 8 channels D/A. Digital oscilloscope and FFT software package available with triggering dual channel, time and frequency domain averaging, printer utilities, 256 points sampling at up to 73000 Hz. \$85.00

## COMMclock /AB

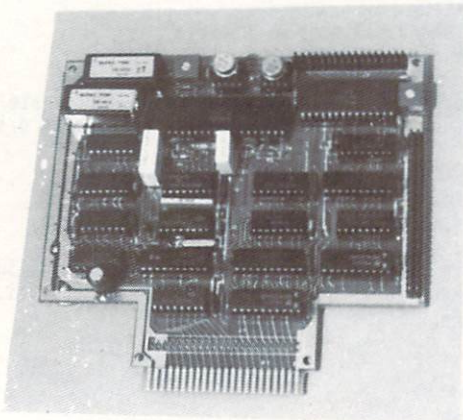
Genesis Computers  
\$ 69.95  
for: C64

Real time clock/calendar with lithium battery backup. Also includes autoboot feature which allows for any program to automatically boot and run on power up. Autoboot time delay is switch selectable and will load from disk or tape. Clock is crystal controlled for accuracy. Battery keeps clock running for up to 9 months on power down.

## COMsense

Genesis Computers  
\$ 69.95  
for: C64

Real world input device which plugs into the joystick port and provides 4 simple open/close contact inputs and 2 analog to digital inputs. A to D probes are driven by +5 volts on board and inputs are fused to protect the computer.



## Data-1

CGRS Microtech  
\$ 279.00  
for: C64

Data acquisition and control board that utilizes the intersil or maxim 7109 12 bit a/d converter - 16 channels of analog input - real clock with battery backup. 12 bit d/a and 12 ttl output bits along with driver software. The a/d will allow a maximum of 30 conversions per sec.

## Diadacs 1 (fast)

CGRS Microtech  
\$ 325.00  
for: C64

Same as Diadacs 1, but has on-board ROM space and 100-microsecond conversion.

## Diadacs 1 (mini)

CGRS Microtech  
\$ 99.95  
for: C64

8-bit / 8-channel version of Diadacs 1. 12 digital outputs, 12 digital inputs.

## Diadacs 1

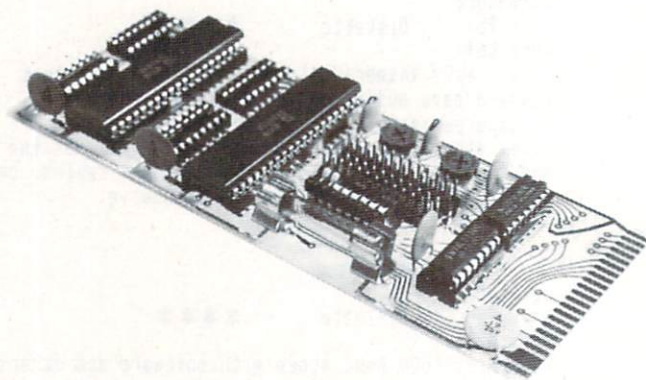
CGRS Microtech  
\$ 279.00  
for: C64

12-bit A/D converter: 30 conversion/sec. / 0-10 volt input / controlled from BASIC or M.L.  
12-bit D/A converter: 0-10 volt output. CMOS real-time clock-calendar w/ battery backup / 12 ttl digital inputs for monitoring switches, relays, alarms, etc. 10 digital outputs for controlling relays, digital displays, alarms, etc. Includes user manual and software driver.

## MiniData-1

CGRS Microtech  
\$ 99.00  
for: C64

8 bit, 8 channel a/d converter - contains the same real time clock as the 'Data-1' and has 12 digital outputs (ttl), 12 digital inputs (ttl) and space on board for 2 - 8 bit d/a converters.



## Model 64IF22

Schnedler Systems  
\$ 169.00  
for: C64

Dual 6522 Versatile Interface Adapter Board for general purpose control interface. Each board supports two VIAs properly interfaced to the computer via the cartridge expansion port. Each provides four 8-bit ports, for a total of 32 i/o lines, and 8 control or handshake lines. Four boards can be daisy-chained from one computer to give 16 ports. Extensive documentation.



### Proto-64 (6.5x4.5)

Boreas Products  
\$ 15.95  
for: C64

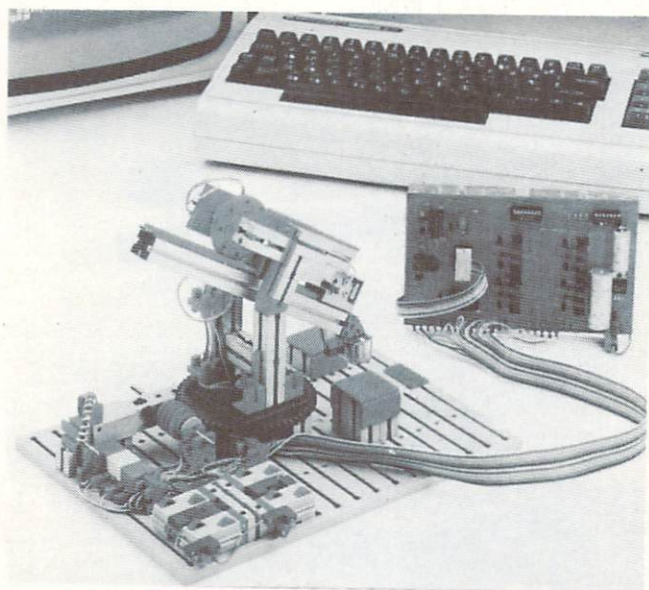
General purpose prototyping board for the C64. 44 contact gold-plated edge connector / pad per hole / plated thru holes / .100 inch hole spacing (vert) & .300 inch hole spacing (horz) / plugs into the expansion port. A 4-1/2 inch by 4 inch version is also available for \$12.95.

>>>> Circle Reader Service No. 33 <<<<

### QuikData-1

CGRS Microtech  
\$ 325.00  
for: C64

Has most of the same features as the 'data-1', however the a/d is the national ADC 1205 which has a 100 microsec conversion time, this will allow approximately 6000 conversions per second. It also contains on board ROM space for various ROMs.



### Robotics Automat Kit

fischer america  
\$ 199.00 Diskette  
for: C64 C128

Robotics construction kit includes interface and software to build 10 different robots (or design your own.) Simulates real industrial arms, machining centers, plotters, sorters, digitizers & more with accuracy of +/-1mm. A must-have for every school! Among the top 10 products ever designed for the C64. May be expanded with other FischerTechnik kits.

(-B.D.) See review, Issue #7

>>>> Circle Reader Service No. 35 <<<<

### Viadas-1

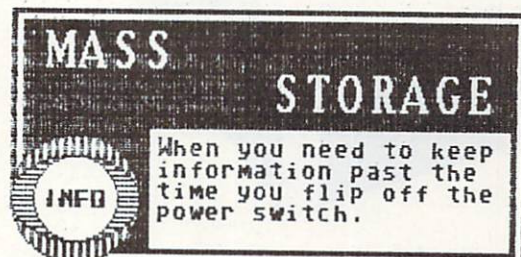
CGRS Microtech  
\$ 350.00 Diskette  
for: C64

Software to run a small process control - includes the following features: curve fit generator (allows the operator to enter break points for sensin devices), alarm summary with descriptors and output control set points.

### VIController

Genesis Computers  
\$ 59.95 Diskette  
for: C64

BSR X-10 line carrier remote controller. Can address all 256 locations and execute all standard BSR commands. Complete with six easy to use scheduling programs for daily and weekly control operations. Can be used with COMclock and COMsense devices to create a complete home control system.



### SFD-1001 Disk Drive

Commodore  
\$ 199.95

\*\*\*\*\*

Expand your system to one megabyte with this double-sided disk drive with fast and reliable access. Currently available only from Progressive Peripherals and Protecto Enterprises. Requires an IEEE interface. (-Staff)

### MSD Dual Disk Drive

Micro Systems Development  
\$ 695.00  
for: C64

\*\*\*\*

A dependable dual drive that can be configured as either a dual drive or two single drives. IEEE interface at additional cost. 98% compatability of commercial software with serial set-up, while the parallel set-up increases speed, it decreases compatability by about one half.

(-B.D.) See review, Issue #4

### MSD Single Disk Drive

Micro Systems Development  
\$ 399.00  
for: C64

\*\*\*\*

Has a high degree of compatability with 1541 disk software. Software reconfigurable operating system with serial or IEEE interfaces (IEEE interface at extra cost).

(-B.D.)

### Indus GT

Indus Systems  
\$ 399.95 Diskette  
for: C64

\*\*\*\*-

Sleek, compact, quiet disk drive with separate power supply, no vents, and transparent door to keep out dust, front mount switches (drive number, write protect, display of track or error), fast load, fast copy, wedge and more.

(-B.D.) See review, Issue #5

### Microwafer

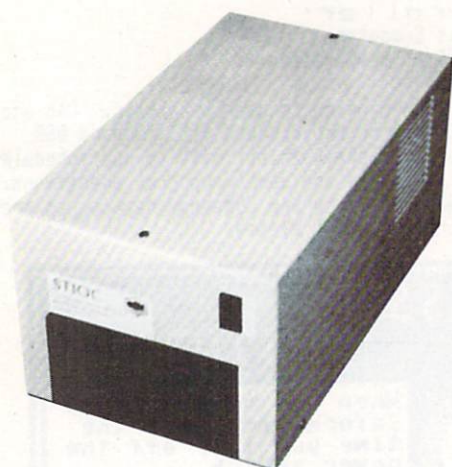
Entrepo  
\$ 139.95  
for: C64

\*\*

170k microwafer drive (\$84.95), word manager word processor (\$34.95), plan manager spreadsheet (\$34.95), speed file manager (\$69.95) available seperately or packaged together for \$139.95. Cumbersome to use, and incompatible with most commercial software. A disk drive is a much wiser investment.

(-M.B.)





### CSI ST10C 10M Hard Disk Drive

Computer Specialties

\$ 1595.00

for: C64 C128

10 megabyte hard disk for all Commodore computers. At speeds approaching twice that of the 1541, with no provisions for managing its huge directory, close to a week needed to back up a full disk, and total disregard for shock-mounting, purchasers of this overpriced behemoth have our sympathy.

(-B.D.) See review, Issue #9

>>>> Circle Reader Service No. 16 <<<<

### Enhancer 2000

Comtel Group

\$ :na Diskette

for: C64

High quality 'smart' and 1/2 height disk drive compatible with the 1541.

### Microwafer Teacher

Entrepo

\$ 129.95

for: C64

170k microwafer drive (\$84.95) with programs for general math, spelling tutor, and typing tutor.

### Mirage

World Disk Drives

\$ 249.95

for: C64

Fully Commodore compatible disk drive system. Includes: built-in parallel printer interface (with CBM graphics and CBM ASCII to standard ASCII), system reset button, Dip switch selectables, Apple II(c) compatible, fast loader, copy programs and more.

>>>> Circle Reader Service No. 30 <<<<

### PSA/CS-1

Peripherals System of America

\$ 239.99 Diskette

for: C64

Commodore single disk drive, formats in 16 sec., reset button, switchable device number, and two popular copy utilities.

### The Clone Dual Disk Drive

HBH Sales

\$ 499.00 Diskette

for: C64

Dual drive compatible with 1541 disks, incorporates a durable metal casing which has a low heat retention and doubles as a monitor stand.

## GADGETS CABLES AND ETC.



Tons of neat stuff you can plug into your computer. Now you can control the world!

### B.I. 80

Batteries Included

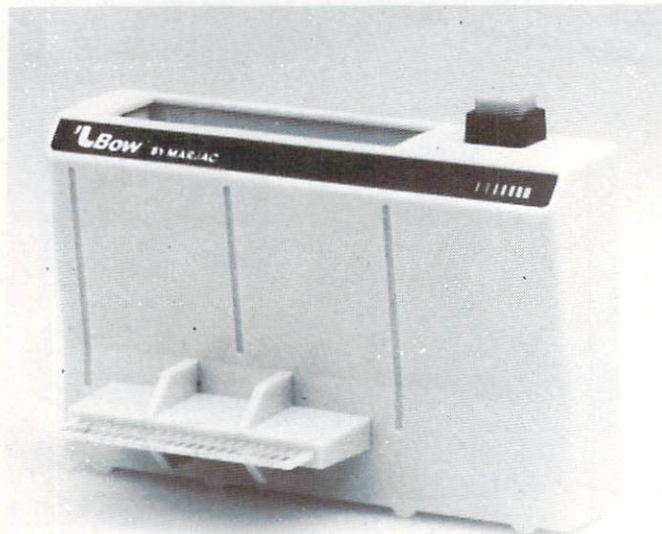
\$ 199.95

for: C64

\*\*\*\*\*

Hardware 80-columns for the C64 with BASIC 4.0 commands. A high-quality, clear 80 columns on a monochrome monitor. Reads 'ok' on a Commodore color monitor too.

(-B.D.)



### 'LBow

T.I.E. Limited

\$ 24.95

for: C64

\*\*\*\*

Well-made cartridge holder incorporates a reset button and program listing for recovering last program used. Provides one vertical and one normal (horizontal) cartridge port extending from the 64's single port. Less stress on cartridge and C64 board.

(-B.D.)

>>>> Circle Reader Service No. 1 <<<<

### Cardboard 5

Cardco

\$ 69.95

for: C64

\*\*\*\*

Attractive, fuse-protected, 5-slot expansion board for the 64. Each slot has 4 LED status indicators and two switches to directly control various memory and access functions. Two master switches and indicators allow override at any time. Can be use to simply eliminate constant insertion and removal of cartridges.

(-B.D.)



### Smartslot

Progressive Peripherals

\$ 89.95

\*\*\*\*

for: C64

Fuse protected hard switched or software selected expansion slots (4) and reset switch.  
(-B.D.)

### Video Pak 80

Data 20

\$ 179.95

Diskette

\*\*\*\*

for: C64

40 columns in color and 80 columns with a monochrome monitor. Includes terminal and screen-print software.  
(-B.D.)

### Color-80

Richvale Telecommunications

\$ 39.95

Diskette

\*\*\*

for: C64

80 columns from software. Uses no basic RAM, compatible with their C64-Link.  
(-B.D.)

### VID(video improvement device)

Computer Accessories

\$ 39.95

\*\*\*

for: C64

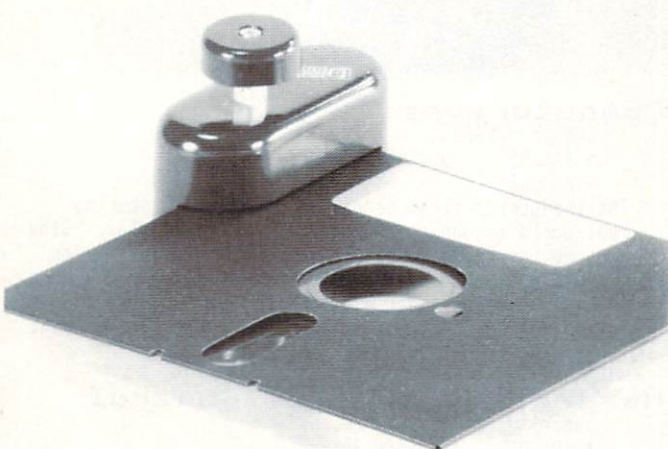
Plug this little widget into your 5-pin video port and hook your t.v. to the usual rf plug. Visible improvement of picture quality on many t.v.'s. See 'Double-Take' in the premiere issue.  
(-B.D.)

### Colored computer paper etc.

Papertail

\$ :na

Assorted computer paper products in seven brilliant colors. Fanfold paper / envelopes / clean-perf. Sample pack (200 sheets of any four colors) is \$24.95.



### Disk Doubler

T.I.E. Limited

\$ 12.95

for: C64

Allows 5 1/4 inch single-sided disks to be used on both sides by cutting a precisely located square notch on the other side of the disk. Features a smooth enameled finish and a high leverage round push button handle for easy use and handling.

>>>> Circle Reader Service No. 19 <<<<

### Multiple Printer Connector

Progressive Peripherals

\$ 89.95

for: C64

Multiple printer connect box for serial printers or interfaces, up to 4 printers for use with the Supershipper to avoid loading and unloading different forms.

### Panic Button

Microventions

\$ 19.95

for: C64

Reset switch with a 3 foot cable and documentation on how to recover BASIC programs in memory.

### PDI Dinset

Public Domain

\$ 5.00

for: C64

Reset button that plugs into an empty serial port.

### PDI Serial Cables

Public Domain

\$ 10.00

for: C64

Ten foot fully shielded serial bus cable (15 foot available for \$15).

### Single Slot Expansion Board

CSM Software

\$ 24.95

for: C64

Fully switched, including game, exrom, enable and power switches. LED indicators for type of cartridge. Includes re-set button. It is compact, approximately the same size as a cartridge.

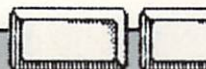


### Underware Ribbon

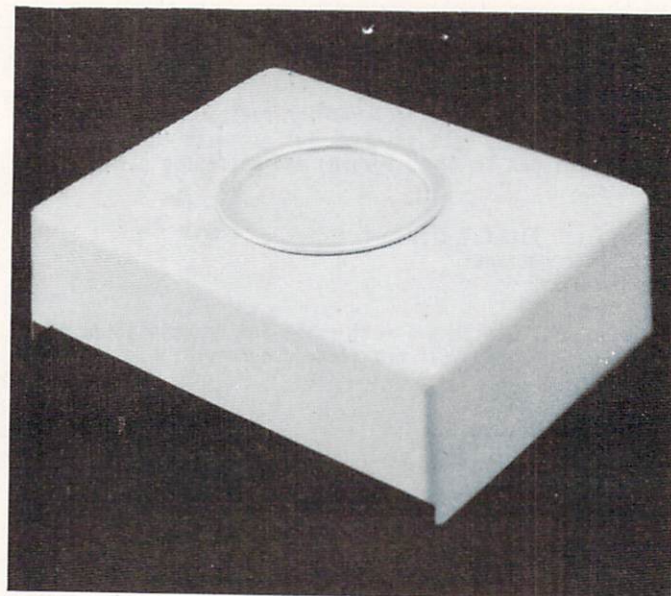
Diversions

\$ 14.95

Turns your computer into an instant T-shirt maker. Print any image on plain paper using this special ribbon, then iron that image onto a shirt. Each ribbon produces 30-100 transfers that are permanent and washable. For NEC8023, C.itch prowriter, Okidata 80 & 90, Star Gemini 10x & 15x.







### Uni-Kool model C-100

Uni-Kool  
\$ 39.95  
for: C64

Disk drive cooler for Commodore's 1541 and SFD-1001 drives. Special filter, 110v, 60 cycle, operates at 8 db and moves 15 cubic feet per minute of air thru the drive's top vents. 2.25 inches high.

>>>> Circle Reader Service No. 42 <<<<

## SENSORY PERIPHERALS

Let your computer see, hear, feel, and take in other input from the outside world.

### MicronEye Camera

Micron Technology  
\$ 295.00 Diskette \*\*\*\*  
for: C64

Solid state imaging device that connects to the expansion port of the C64, software included allows display of images to screen. Also, grey-scale, software controlled shutter, frame store and recall. A second model (\$485 list) is also available with the difference being in the maximum distance the device may be from the computer.

(-B.D.) See review, Issue #2

### S. A. M.

Don't Ask Computer Software  
\$ 34.95 Diskette \*\*\*\*  
for: C64

SAM the Software Activated Mouth has natural (well...) sounding speech, variable pitch, speed, inflection, english text-to-speech conversions, easy to use in programs.

(-B.D.)

### Votrax Speech System

Votrax  
\$ 395.00 Diskette \*\*\*\*  
for: C64

255 programmable frequencies for sound effects, 16 amplitudes, simultaneous speech and either music or sound effects, 8-octave 3-voice music, serial and parallel interfaces included. Also, built-in programmable clock, exceptions tables, programmable rate and inflection, 3500 character buffer and more! (-B.D.)

### 64-Talker

Talktronics  
\$ 89.00 Diskette  
for: C64

Plug-in speech synthesizer with 2 voices and controlled thru simple BASIC or machine language commands.



### Computereyes

Digital Vision  
\$ 129.95 Diskette  
for: C64

The industries first economical means of capturing real-world images on the C64's high res display. Slow scan device that connects between any standard video source and the 64's user i/o port, and a b/w image can then be acquired under simple software control. Enhancements are available to support Flexidraw, Print Shop, Doodle, Koala Pad and Newsroom.

### Hard Wire Security/Control

Jance Assoc.  
\$ 195.00 Disk or Tape  
for: C64

Security control system run by your C64. Includes alarm bell, wire, switches, auto phone dialer, and everything else thats necessary. Compatible with BSR modules for control of lights and appliances. Wireless version is also available for \$349.





### ProVoice

Genesis Computers  
\$ 99.95 ROM  
for: C64

Speech synthesizer for the C64, contains ROM based text to speech conversion, 12 new BASIC commands (speak, help, etc.). Screen echo mode allows BASIC programs to talk without any modification. Built-in speaker and amplifier, plugs into expansion port so it may be used with a modem to create a 'talking terminal'.

### Video Digitizer 64

Print Technik USA  
\$ 198.00 Diskette  
for: C64

Video digitizer for the C64 that will also do full color printing on any color printer. Includes alarm program for comparing 2 pictures (excellent for counterfeit examiners), Videoshow for slide projection, View program for Koala formats, light pen option, and more.

### Voicebox

Alien Group  
\$ 129.95 Diskette  
for: C64

'World's only singing speech synthesizer', unlimited vocabulary, natural sounding, inflection control, text-to-speech & phoneme input. Plugs into user port, includes a built-in speaker, volume & pitch controls. Works with 'When I'm 64' music software.



### Flexidraw Light Pen

Inkwell  
\$ 149.95 Diskette \*\*\*\*\*  
for: C64

Professional grade light pen (with single pixel resolution) and 'Penware' drawing software. This is not a toy (although it's lots of fun and easy to use). Includes a sophisticated machine language drafting software, and separate BASIC routines for programmable graphics, sprite editor, templates, and more!

(-B.D.) See review, Issue #2

### Koala Pad

Koala Technologies  
\$ 99.95 Disk or ROM \*\*\*\*\*  
for: C64

A medium-sized input pad that responds to finger or stylus pressure. Comes with 'Koala Painter' color drawing software, uses the C64's 16 colors plus 136 mixed-colors. Features 'oops' mistake correction, sophisticated block moves, quad-symmetry mirror mode, and more! This is one of the best C64 products around!

(-B.D.) See review, Issue #2

### Command Control Trackball

WICO  
\$ 49.95 \*\*\*\*\*  
for: C64 C128

Responsive game or graphic control with 360 degree movement any where on the screen and fingertip sensitivity.

(-M.B.)

### Tech-Sketch LP-10s Light Pen

Tech-Sketch  
\$ 39.95 \*\*\*\*\*  
for: C64

This low-cost light pen does a nice job with Tech-Sketch's version of the 'Micro-Illustrator'.

(-B.D.)

### Super Sketch

Personal Peripherals  
\$ 59.95 ROM \*\*\*\*\*  
for: C64

A different approach to graphics input that uses a stylus arm attached to a plastic 'clip-board'. Unfortunately, while this arrangement has definite appeal, there is too much mechanical play in the stylus arm to take advantage of the good graphics capabilities of the 'Graphics Master' software (included).

(-B.D.)

### Edumate Light Pen

Programmer's Institute  
\$ 29.95 \*\*\*  
for: C64

This entry-level pen is compatible with Programmer's Institute's children's educational software and their 'Peripheral Vision' graphics software.

(-B.D.)

### Koala Light Pen

Koala Technologies  
\$ 99.95 Diskette \*\*  
for: C64

Light pen with software for drawing freehand using different brushes and colors and geometric shapes all on your screen. 'In summary stay away from this product...you will find their Koala Pad product much more satisfying and a good value at prevailing prices.

(-B.D.) See review, Issue #5

### Cardkey/1

Cardco  
\$ 39.95 Tape  
for: C64

Has 16 keys and plugs into the joystick port or can be piggy-backed with keyboard connector, eliminating the need for driver software and avoiding software compatibility problems.





### Commodore Joystick

Kraft  
\$ 12.95  
for: C64

Color matched to the C64. Includes 'Mazemaster' selector for 4-way or 8-way operation, positive stick mechanism, rapid fire button, and extra long 8 foot cord. Also available in 'Switch-Hitter' model for left and right hand play for \$14.95.

### Flexikey System

Gosub of Slidell  
\$ 69.95 Diskette  
for: C64

A 20 key numeric pad with BASIC driver software and each key may be defined to have 3 values.

### Muppet Learning Keys

Koala Technologies  
\$ 79.95 Diskette  
for: C64

Touch tablet device which makes using the computer easy for the littlest kids, and makes learning numbers and letters and colors much more fun. For ages 3 and up.

### Numeric Keypad

CSM Software  
\$ 64.95  
for: C64

No software required and 100% compatible with all software. Easily installed, full travel keys with numeric, decimal point, shift, return, comma, inst/del, and cursor keys. The shift key can be used with the other keys to produce others like: \$, %, (, ). Also has all arithmetic keys.

### QuickShot controllers

Spectravideo  
\$ :na

Various joysticks of different styles most all of which have suction cups for stability. Also, now available is the 'Joycard' (combination joystick and track ball) with all 8 directions at the touch of a finger on the touch-sensitive pad.

### Space Pen

Soniture  
\$ 149.95 Diskette  
for: C64

A 3-D input device that lets you send to ultrasonic signals to the computer. Compatible with existing graphics packages in 2-D only. Including sampler software.



### Voice Master

Covox  
\$ 89.95 Diskette  
for: C64 C128

Digitizes your speech for playback under computer control. Recognizes your spoken words as commands. Both speech playback and recognition can be combined into one user BASIC or m.l. programs. Also, measures speech fundamental pitch and produces music locked to the singer's voice. It can store a song which can be edited and even printed out as a musical score.

### WICO Joysticks

WICO  
\$ :na  
for: C64 C128

Four models (with prices ranging from \$17.95 to \$32.95): The Boss, Super Three Way, Bat Handle, and Grip Handle.

## DISPLAYS

Give your computer's video some place to go.

### 1702 Color Monitor

Commodore  
\$ 299.95  
for: C64

\*\*\*\*

A fine monitor which improves significantly over TV and even composite video monitors. Make sure you take advantage of the hi-performance back-panel inputs. (-B.D.)



# PRINTERS



Eventually, you'll need a hard copy. Printers come in all sizes, prices, and formats.

## C. Itoh 8510SC

C. Itoh  
\$ 895.00  
for: C64

\*\*\*\*\*

This is the color edition of the 180 cps C. Itoh (see-ee-toe) 8510S. Four color ribbon cartridge can produce sixteen solid colors. Push-tractor fed. (-B.D.)

## Cosmic Printer/Plotter

Peripherals System of America  
\$ 149.95  
for: C64

Centronics parallel, 4 colors, 40 and 80 character mode selectable.

## GP-700A

Seikosha  
\$ 399.00

Graphic color printer.

## Okimate 10

Okidata  
\$ 239.00  
for: C64

40 shades of color possible from a 4-color ribbon cartridge. Light-weight and compact. Ribbons are good for one pass only so printing can get rather expensive (ribbons are about \$9 each and are good for about 10 pages of output). The color quality is good (from the samples we've seen) and printing can be done on acetate for direct transparencies.

## Cardco LQ/1

Cardco  
\$ 599.95  
for: C64

A 14 cps daisy wheel printer that comes fully interfaced for the C64 as well as standard parallel, supports underlining, bold & shadow print, true proportional spacing. Software supplied for typewriter emulation and can also be used as a two color dot graphic printer for custom letter heads and logos.

## C. Itoh 8510S

C. Itoh  
\$ 794.00  
for: C64

\*\*\*\*\*

180 cps draft mode, 120 cps near-letter quality mode (the nlq proportional character set looks very convincing), tractor/friction/roll paper feeds. Does not handle shipping labels with the same reliability as some due to the 'push-tractor' instead of a pull-tractor, nonetheless, a superior printer. (-B.D.)

## Star SG-10/15

Star Micronics  
\$ 299.00

\*\*\*\*\*

Ten inch printer (15 inch lists for \$399) that prints at 120 cps and 30 cps in near letter quality mode. Has 2K buffer (16K on the 15). Also features an IBM mode (ask me if I care) and has easier to reach side-mounted DIP switches. Excellent documentation.

## Epson FX-80

Epson America  
\$ 599.95  
for: C64

\*\*\*\*

160 cps, widely-supported popular printer with various fonts and pitches, dot-graphics, downloadable fonts, single-sheet and pin-fed paper handling. (-B.D.)

## Mannesmann Tally Spirit-80

Mannesmann Tally  
\$ 399.00  
for: C64

\*\*\*\*

Only 80 cps, but compact and quiet. (-B.D.)

## Star SR-10/15

Star Micronics  
\$ 799.00

\*\*\*\*

200 cps, 50 cps in near letter quality mode and 2K buffer (16K on the 15). The only thing I don't like about the SR series is the 'push' type tractor which has replaced the more reliable 'pull' type found on other models. The push tractor leads to occasional feed problems with labels and heavier stock like index card stock. Everything else about the printer is first class. (-B.D.)

## Epson LQ-1500

Epson America  
\$ :na

From 200 cps in draft mode to letter quality.

## Hermes Printer

Hermes Products  
\$ :na

Multi-mode printer with 120 cps NLQ and 480 cps in draft mode.

## Juki 5510

Juki  
\$ 500.00

9 inch platen printer with 3K buffer (expandable to 15K), 30 cps NLQ, 180 cps draft, bidirectional and logic seeking.

## SP-1000A

Seikosha  
\$ 299.00

High quality printer with 100 cps standard and 24 cps NLQ.



## MISCELLANEOUS HARDWARE



This is stuff we  
couldn't identify,  
but it all has some-  
thing to do with  
computing.

### Stack Light Rifle

Romero Enterprises

\$ 59.95 Diskette \*\*\*-

for: C64

This is light-sensitive input device in the shape of a rifle (also breaks down to pistol) which connects to your C64 by a 12-foot cable. Most of the games on the included disk were not too great, some were very boring after a short while. All only scan for the vertical position of the gun when fired. The gun itself however has a nice feel for a toy gun.

(-Staff)

### 1541 Super ROM

MegaSoft

\$ 39.95

for: C64

Claims: fast load, save, verify, scratch, & validate. 10 second format. Head rattle disabled. Two to eight times speed increase.

### 801 Upgrade Chip

Kobetek Systems

\$ 25.00

for: C64

Upgrade character ROM for Commodore's MPS-801 printer. Provides lower case descenders and a generally more pleasing appearance of all characters - letters are more balanced. Includes complete instructions, and installs in 10 minutes.

### Acco Printer Stand

Acco

\$ :na

Space saving printer stand, adjusts to hold 80 or 132 column printers and comes with or without forms feeder and printout tray.

### B.O.S.

Peripherals System of America

\$ 49.95 Diskette

for: C64

Best Operating System, for the C64 with drive. Auto boot, fast load (twice normal speed), rest button, utilities, editor, ML monitor and more.

### Compu-Case

Computer Case

\$ :na

for: C64

C64 and accessories carrying cases of various size (prices range from \$109 to \$229).

### Compubench

Richardson & Associates

\$ :na

Solid oak monitor/printer stands of different heights and widths with prices from \$65 to \$75.

### CPS-10 power supply

HBH Sales

\$ 59.95

for: C64

Replacement power supply for your C64, includes two 100 watt outlets, surge and spike protection.

### Hi-Rise

Unique Wood Products

\$ 39.95

for: C64

Solid oak combination monitor, disc and printer stand.



### LeRoy's Cheatsheet Overlays

Cheatsheet Products

\$ 3.95

for: C64

Plastic laminated keyboard overlays covering many of the popular word processors, spreadsheets, data bases, printers, languages and utilities, for the C64 and VIC-20.

### Media Mate & Disk Bank

Amaray

\$ :na

Diskette storage cases of varying size (for 5-1/4 and 3 1/2 inch disks), capacity, and with or without lock. List prices range from \$14.95 to 29.95.

### MicroStuffer Printer Buffer

MicroBits Peripherals

\$ 149.95

for: C64

External 64K printer buffer that will accept parallel input at up to 8,000 cps. Can provide serial output at wide range of baud rates with the addition of the MPP-1156 serial adaptor. One button repeat, LED indicators, reset button and accepts data from any standard centronics parallel type interface.





### Mag-Rak

R & L Products  
\$ 34.95

9x11 inch copy-holder designed primarily to page-display with line-guide or display an intact computer magazine containing program listings. Also accommodates single sheets, paperback and hardback books.

### Seiko PC Datagraph

Seiko  
\$ :na  
for: C64

Portable 2K RAM computer terminal for your wrist with 12 distinct data files for travel schedules, appointment times, key dates, foreign word translations and more. Alarm alerts you up to 1 year in advance. Hooks directly to the computers RS232 port.

### Spartan Apple II+ Emulator

Mimic Systems  
\$ 599.00  
for: C64

This product gets my vote for the longest promised without delivery (not even a review unit.) If it works, this big box will turn your C64 into an Apple II. All I can say is that if you want to run Apple software then why on earth would you choose to tie up your C64 when you can go out and pick up a new Apple (100% compatibility guaranteed) for about the same price ?? This one just does not compute!

(-B.D.)

### Spikeater

Control Corp of America  
\$ 49.95 Diskette  
for: C64

Power line spike and surge protector that also centralizes computer power control.

### The Prompter

Transierra Technology  
\$ 5.95  
for: C64

Package including 10 plastic function key overlays and 15 label sets, so you can makeup each overlay for each piece of software you own.

### Tilt 'n Turn CRT Stand

MicroComputer Accessories  
\$ 29.95

12 x 12 inch platform, made of high impact styrene in a putty finish.

### Underware Color Pens

Diversions  
\$ 14.95

Set of 5 colors (red, blue, green, orange, yellow) that are used to add color to the paper transfers (made with the 'Underware Ribbon') prior to ironing, results are permanent and washable.

### Underware Coloring Kit

Diversions  
\$ 19.95

Consists of 20 sheets of special transfer paper and a set of 5 color pens. The paper has a special kind of ink and is designed to be used for printers for which 'Underware Ribbons' are not available.

### Power Up!

C&B Enterprises  
\$ 49.95  
for: C64

A heavy duty power supply for the C64. Has a 3 amp TO-3 regulator with heat sink. The pri. and sec. is fused and 'transient protection' is provided on 5 levels. It is switched, LED indicator, attractive metal housing, repairable (schematic included), 12 month warranty and USCUG approved.

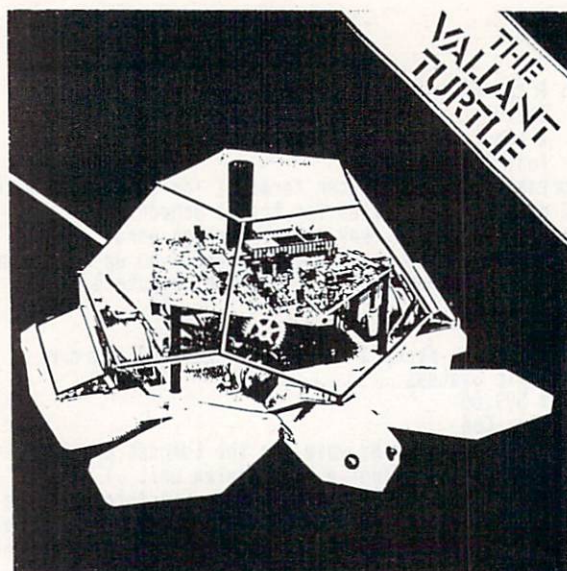
### Rolltop Disk File

MicroComputer Accessories  
\$ 35.95

Stores 120 - 5 1/4 inch disks, includes 10 dividers and color coded labels, also available in several colors and with or without locks.







## Valiant Turtle

Kobetek Systems

\$ 365.00 Diskette

for: C64

Remote controlled robot by infra-red transmitter. Includes software driver for LOGO compatibility (English or French). Powered by rechargeable ni-cad batteries, carries pen which can be raised or lowered to trace all movements. Draws smooth circle and arcs. Package includes turtle, batteries, infra-red transmitter, power adapter, pen and manuals.

>>>> Circle Reader Service No. 43 <<<<

## INFORMATION SERVICES

INFO

Information, data, curiosities, conversation: all can be had on the networks (for a price).

## CompuServe

CompuServe

\$ :na

\*\*\*\*

The largest Commodore-oriented network in the world, probably because it has the Commodore Information Network, Commodore's own informational service. Memberships are \$35/yr. and \$6/hr. connect time.

(-Staff) See review, Issue #6

## Dow Jones/News Retrieval

Dow Jones

\$ :na

\*\*\*\*

Like CompuServe (minus CIN) and business oriented service. Charges are a one-time fee of \$75 and \$0.20/min. connect time (\$12/hr).

(-Staff) See review, Issue #6

## PlayNet

PlayNet

\$ :na

Diskette

\*\*\*\*

for: C64

Has beautiful on-line graphics and sound, including games, but it's not videotex. No terminal program needed, screen displays and games are loaded from one of the 3 disks provided when you join (\$34.95) and you play others via modem. Easy to get around on and not like other networks.

(-Staff) See review, Issue #6

## The Source

The Source

\$ :na

\*\*\*\*

A commercial network alot like CompuServe minus the Commodore Information Network. Memberships are \$49.95 to join plus \$10/mo. service charge and \$7.75/hr. connect time.

(-Staff) See review, Issue #6

## B128 User's Group

B128 Users Group

\$ :na

Includes monthly newsletters, public domain software library and a bbs, all for the B128 computer.

## Creed BBS

Coast Bulletin Board

\$ 49.95

Diskette

for: C64

Formerly 'Electronic Magazine BBS', this full fledged BBS with new punter download protocol. Compatible terminal program with over 40 disk files and 12 page manual. Written in 12k Basic and is easy to alter. 1 or 2 drives. Compatible with all CBM or RS232 or IEEE devices.

>>>> Circle Reader Service No. 13 <<<<

## Delphi

General Videotex

\$ 49.95

Telecommunication service with E-mail, conferencing, news, travel, financial info, Commodore SIG, and more.

## PERIODICALS

INFO

You are holding one right now.

## Ahoy!

Ion International

\$ 2.50

\*\*\*\*-

Monthly publication devoted to Commodore computing. Ahoy! seems to fluctuate from issue to issue, but seems recently to be pulling ahead of Run and Compute!'s Gazette in content and style. Of the 3 'big names', I would recommend this one most.

(-B.D.)



## Commodore Microcomputers

Commodore Publications

\$ 2.50

\*\*\*\*-

Commodore's companion publication to 'Power Play' aimed at the intermediate to advanced user. Good mix of articles and reviews, well illustrated with decent photos. Reasonably good coverage of third-party products. Don't expect to read any criticism of Commodore from this gang; their paychecks are still signed in West Chester, PA.

(-B.D.)

## Commodore Power/Play

Commodore Publications

\$ 2.50

\*\*\*\*-

Bi-monthly publication by Commodore is attractive, & well put together with lots of color, photos, and a nice blend of articles, reviews, and programs for beginning to intermediate computists. Tows the company line, and avoids controversy, but consistently delivers useful information in a pleasant package.

(-B.D.)

## The Midnite Gazette

Midnite Software

\$ 4.00

\*\*\*\*-

for: C64

Jim Oldfield & Jim Strasma are the movers behind this scrappy little newsletter/magazine. Long respected as a knowledgeable & sincere journal, Midnite has recently gone from bi-monthly to monthly, and has gotten a bit skinny in the process (Aug. is only 20 pgs.). Black & white format- mostly text, sparse advertising. Reviews submitted by wide range of contributors. Good articles and editorials.

(-B.D.)

## Compute!'s Gazette

Compute Publications

\$ 2.95

\*\*\*+

for: C64

Slick monthly publication with coverage of Commodore's VIC20, 64, Plus/4, and newer computers. Emphasis is on type-in games and occasional utilities. Reviews are generally candy-coated but reasonably current. Well-illustrated and laid-out. Goes with the flow, avoiding controversy and originality. Features a good selection of advertising.

(-B.D.)

## RUN

CW Communications

\$ 2.95

\*\*\*+

for: C64 C128

This slick monthly Commodore magazine is chock-full of ads, lots of color and photos, occasional decent articles. Reviews are often out of date and, worse, not to be trusted. What can you say about a supposedly knowledgeable publication that prints shameless gushing praise for a turkey like the PLUS/4 month after month. Best features: MAGIC column, and STRASMA's 'Commodore Clinic'.

(-B.D.)

## Transactor

Transactor Publications

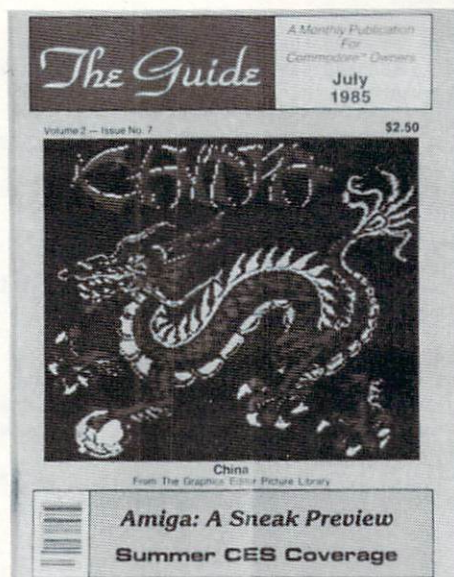
\$ 2.95

\*\*\*+

for: C64

Bi-monthly Canadian publication which stresses the technical side of Commodore computing. Very few photos, few ads, and color on the cover only. If you think INFO has problems getting out on a regular basis, you obviously haven't experienced Transactor! My copies come about one every 6 months!

(-B.D.)



## The Guide

The Guide

\$ 2.50

\*\*\*

(Formerly N.W. Users' Guide) This independent monthly covers Commodore computing with sincerity, honesty, and occasional humor. Not real 'meaty' yet, but has improved steadily every issue. One year subscriptions are \$18.00.

(-B.D.)

>>>> Circle Reader Service No. 40 <<<<

## TPUG Magazine

TPUG

\$ 2.95

\*\*\*

for: C64

Published 10 times a year by the 'world's largest Commodore user's group'...Toronto Pet Users Group in Canada. This publication has historically been at the center of Commodore computing coverage in Canada, with a fairly technical emphasis. Still has that hacker flavor of the '70's.

(-Staff)

## Compute!

Compute Publications

\$ 2.95

\*\*

Monthly publication with Commodore, TI, Atari, Apple, IBM, and misc. coverage. Compute! has really taken a downturn since mid '85; the last few issues have been almost entirely devoid of photos, art, or useful reviews or articles. I predict this title will go down for good by the first qtr. of '86, with subscribers transferred to the superior 'Gazette'. As things stand, I won't be renewing MY subscription.

(-B.D.)

## COMAL Today Newsletter

Comal Users Group

\$ 14.95

for: C64

COMAL news, tips and ready to type in programs. \$14.95 for 6 issues and \$2 for a sample copy.



## Machine Code

FS! Software  
\$ 40.00

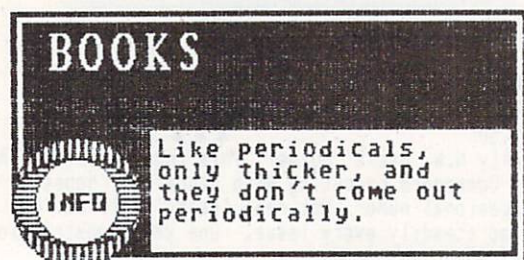
A newsletter oriented toward the person who is interested in machine (assembly) language programming. Includes beginners column, quarterly programming challenge, articles of all m.l. facets, home brew electronics, robotics, 1541 programming, high speed graphics, and more. 1st issue available Fall 85. Quarterly publication. Each subs. includes a free copy of 'The Machine Shop'.

==== Circle Reader Service No. 29 =====

## Program Protection Newsletter

CSM Software  
\$ 35.00  
for: C64

Each month 3-5 or more programs are covered. The protection schemes will be examined and broken down for aid in making an archival copy. This is a how and why approach to program protection with special monthly articles covering the DOS, operating system, product reviews, eeprom programming and more.



## 64 Programming: Hands on BASIC

Tab Books  
\$ 11.95  
for: C64

Paperback book with practical insight into how programs are developed, tips, and tricks used by professionals.

## A Survival Guide for the 1541

Stoneridge Software  
\$ 5.00  
for: C64

Quick reference DOS commands, using the wedge, trouble shooting and file handling.

## A.I. Projects for the C64

Tab Books  
\$ 12.95  
for: C64

Paperback book covering artificial intelligence.

## C64 Expansion Guide

Tab Books  
\$ 16.45  
for: C64

Paperback book with guidelines as to what hardware accessories and add-ons are available for the C64.

## C64 Interfacing Blue Book

MicroSignal Press  
\$ 16.95  
for: C64

This book describes 36 hardware interfacing projects for the C64. Description, schematics, theory of operation and parts lists are given for all projects.

## C64 Micro Mansion

Tab Books  
\$ 11.95  
for: C64

Paperback book with info on making your C64 do everything from the burglar watching to turning on/off lights to making coffee.

## Capt. COMAL's Graphic Primer

Comal Users Group  
\$ 19.95 Diskette  
for: C64

Step by step tutorial for using the COMAL language to program hi-res graphics and sprites. Disk includes all programs in the book and more.

## Computer Companion for the 64

Tab Books  
\$ 11.45  
for: C64

Paperback book with up to date, easy to use manual that can make any programming task faster and easier.

## Computer Talk

Stoneridge Software  
\$ 7.50 Diskette  
for: C64

A beginner's guide to telecomputing, covers: basic terms, concepts, how to choose a modem and terminal software, and how to link up with systems. (Only \$5 for book without demo disk).

## E-Z Rental Manager

Fabtronics  
\$ 19.95

Over 32 easy to copy forms, letters and contracts relative to any type of rental property.

## Hayden Books

Hayden Books  
\$ :na  
for: C64

Many titles including: C64 Programs for the Home, Programming Adventures in BASIC, C64 Illustrated, Basic C64 BASIC, Taking Care of Business with your C64 and more.

## PDI Manual

Public Domain  
\$ 10.00  
for: C64

Written for the first 12 C64 and VIC20 collection disks.

## Program Protect Manual Vol. 1

CSM Software  
\$ 29.95 Diskette  
for: C64

Covers the disk drive, bad blocks and tracks, modified directories, cartridges, protection schemes and much more. Covers both BASIC and machine lang. protection schemes. A complete memory map and a disk with many helpful utilities are included.

## Program Protect Manual Vol. 2

CSM Software  
\$ 34.95 Diskette  
for: C64

A new and up to date manual covering the latest advances in program protection. Over 275 pages and a disk to help explain the concepts. Topics include: encryption & decryption, undocumented opcodes, GCR recording, custom DOS routines, advanced cartridge & eeproms, compilers, 1/2 tracks, nibble counting, extra tracks & sectors, and more.



## Serious Programming for C64s

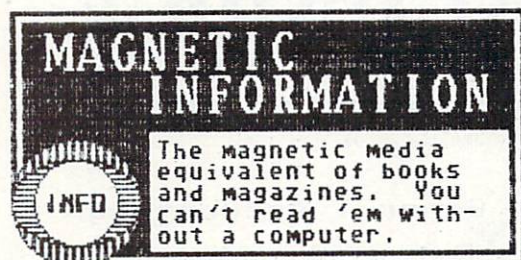
Tab Books  
\$ 9.95  
for: C64

A chance to learn tested and proven techniques for overcoming the C64's programming limitations.

## The Commodore 128 Mode

Microcomscribe  
\$ 14.95  
for: C128

This book addresses the C128 and 1571 drive. Learn about memory organization and operating system.



## Whats Really in the C=64

Schnedler Systems  
\$ 29.95  
for: C64

Reconstructed assembly-language source code listing of the Basic and kernel ROMs. Enables one to understand and use the 'undocumented' ROM routines, and better understand even 'official' kernel routines. Uses labels, not a mere one-line disassembly. Every routine is introduced with a statement of its purpose. Tables are full sorted out and derived, not a mere hex-dump.

## COMAL Today Disks

Comal Users Group  
\$ 14.95 Diskette  
for: C64

Disks to match the COMAL newsletter.



## How to Operate the C=64

FlipTrack Learning Systems  
\$ 29.95 Tape  
for: C64

An audio cassette course that teaches operation of the C64 and peripherals. Begins with start-up procedures and special keys, then moves into simple BASIC programming and use of color, sound, graphics and sprites. Also covers datasette and 1541 operations. Includes a fully indexed quick reference card.

Circle Reader Service No. 25 <<<<

# The GOLD DISK

## Gold Disk Software Series

Gold Disk  
\$ 14.95 Diskette  
for: C64

A series of volumes of high quality software at a price that's hard to resist. Each volume contains a feature program such as a word processor, data base, spread sheet, graphics package, music synthesis. Plus each volume contains high quality games. User friendly and fully documented on disk, which is printable on most printers.

>>>> Circle Reader Service No. 23 <<<<

## How to Operate the VIC-20

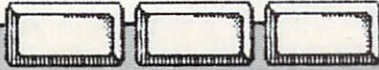
FlipTrack Learning Systems  
\$ 19.95 Tape

Similar to the 'How to Operate the C=64' but for the VIC-20 computer.

## Instructional Video Tapes

Lynn Computer Service  
\$ :na  
for: C64

VHS or Beta tapes available for BASIC, disk i/o, Calc-Result (Advanced & Easy), Practicalc 64, and Multiplan. Prices range from \$29.95 to \$39.95.





# CP/M<sup>TM</sup>

## PRODUCT ROUNDUP!

( CP/M is a trademark of Digital Research, Inc. )

### INTEGRATED SOFTWARE

#### Personal Planner

National MicroWare  
\$ 99.00 Diskette

for: CP/M

Home DBMS, mail list, letter writer, and expense tracker.

#### Starburst

MicroPro  
\$ 195.00 Diskette

for: CP/M

A utility which integrates Wordstar, Infostar, Calcstar and MailMerge.

#### T/Maker

T/Maker  
\$ 275.00 Diskette

for: CP/M

Wordprocessing, spreadsheet, graphics. One of few integrated packages for CP/M.

### BUSINESS ACCOUNTING

#### 1040 Plus

1040 Plus  
\$ 550.00 Diskette

for: CP/M

Full income tax package with videotape tutorial.

#### Accounting Partner

Star Software Systems  
\$ 395.00 Diskette

for: CP/M

g/l, a/r, a/p, billing and payroll system.

#### Application Interpreter

Construction Estimating  
\$ 599.00 Diskette

for: CP/M

Estimates and accounting for contractors.

#### BCA General Accounting

BCA  
\$ 350.00 Diskette

for: CP/M

Full accounting system.

#### Champion

Data Base Research  
\$ 495.00 Diskette

for: CP/M

Full accounting system written with dBase II.

#### Client System

Cyberian Software  
\$ 995.00 Diskette

for: CP/M

Full professional accounting system.

#### Daymaster

Executive Data Systems  
\$ 100.00 Diskette

for: CP/M

Office administration program.

#### Desktop Accountant

Rocky Mountain Software  
\$ 495.00 Diskette

for: CP/M

Integrated accounting system.

#### Desktop Inventory

Rocky Mountain Software  
\$ 295.00 Diskette

for: CP/M

Inventory management system.

#### Forty-Niner

Excalibur Systems  
\$ 295.00 Diskette

for: CP/M

Sales prospect management system.

#### Fund Accounting System

International Micro Systems  
\$ 650.00 Diskette

for: CP/M

Budgeting for non-profit institutions.

#### G&G 1040

G&G Software  
\$ 600.00 Diskette

for: CP/M

Professional tax preparation system.



### G/L/Supercalc Interface

Micro Business Applications

\$ 595.00 Diskette

for: CP/M

Lets SuperCalc read and use general ledger files.

### LBS

Tri-L Data Systems

\$ 995.00 Diskette

for: CP/M

Legal billing system for attorneys.

### Magichack

MagiComp

\$ 59.00 Diskette

for: CP/M

Checkbook accounting system.

### MBA Accountant

Micro Business Applications

\$ 595.00 Diskette

for: CP/M

Complete accounting system with SuperCalc interface.

### Mini-Ledger

Paradigm Consultants

\$ 150.00 Diskette

for: CP/M

Ledger program for small businesses.

### Oil & Gas Distributor

Alpine Data

\$ 1195.00 Diskette

for: CP/M

Accounting and inventory for oil and gas distributors.

### On-Line Order Entry

Univair Systems

\$ :na Diskette

for: CP/M

Point of sale order system with inventory control.

### Peachtree Accounting

Peachtree Software

\$ :na Diskette

for: CP/M

Modular accounting system.

### Post Card Billing

Alpine Data

\$ 295.00 Diskette

for: CP/M

Third-party billing system handles thousands of customers for several clients.

### Priorities

Hula Software

\$ 39.00 Diskette

for: CP/M

Project management system.

### Real World Accounting

RealWorld

\$ 650.00 Diskette

for: CP/M

Complete accounting system.

### Series 9000 PTA

Univair Systems

\$ 995.00 Diskette

for: CP/M

Time and expense billing for professionals.

### Software Fitness Program

Open Systems

\$ 525.00 Diskette

for: CP/M

Fully integrated general ledger and accounting system.

### Solomon

TLB Associates

\$ 595.00 Diskette

for: CP/M

Flexible full accounting package.

### Statistical & Business

Lionheart

\$ 100.00 Diskette

for: CP/M

Statistical and business program series, PERT, Monte Carlo, etc. in \$100 range.

### Sundial Docket & Calendar

Sunbear Systems

\$ 149.00 Diskette

for: CP/M

Docket and calendar with client and date searching.

### Systat 2

Systat

\$ 495.00 Diskette

for: CP/M

Full statistical package with DBMS and graphics.

### VersaBusiness Series

Computronics

\$ 99.95 Diskette

for: CP/M

Payroll, inventory, receivables and payables programs available separately.

### VersaLedger II

Computronics

\$ 149.95 Diskette

for: CP/M

Full feature general ledger program.

## PERSONAL FINANCES

CP/M

### Card-Master

Generic Software

\$ 39.00 Diskette

for: CP/M

Credit card management program.

### Financial Pak

Generic Software

\$ 149.00 Diskette

for: CP/M

Financial planning package.

### Fund-Master

Generic Software

\$ 59.00 Diskette

for: CP/M

Mutual funds investment aid.

### Investment Master

Generic Software

\$ 49.00 Diskette

for: CP/M

Annuity investment calculations.



## SPREADSHEETS

CP/M

### Calcostar

MicroPro  
\$ 145.00 Diskette  
for: CP/M

Wordstar-compatible spreadsheet.

### Multiplan

Microsoft  
\$ 250.00 Diskette  
for: CP/M

A spreadsheet program with a good reputation in the industry.

(-Staff)

### MyCalc

Software Toolworks  
\$ 59.00 Diskette  
for: CP/M

Easy-to-use spreadsheet.

### SuperCalc 2

Sorcim  
\$ 295.00 Diskette  
for: CP/M

Spreadsheet and data manager compatible with Wordstar and DIF files.

### SuperCalc

Sorcim  
\$ 195.00 Diskette  
for: CP/M

Well established spreadsheet.

### Tax Planner

TaxCalc Software  
\$ 150.00 Diskette  
for: CP/M

Tax templates for popular spreadsheets.

## WORDPROCESSING

CP/M

### Colortext

Jupiter Island  
\$ 99.00 Diskette  
for: CP/M

Color word processor.

### Final Word

Mark of the Unicorn  
\$ 300.00 Diskette  
for: CP/M

Dual-mode word processor with auto-save security and error undo.

### FYI 3000

FYI  
\$ 395.00 Diskette  
for: CP/M

DBMS-type sorting and file management for wordprocessor files.

### MagicIndex

Computer Editype  
\$ 295.00 Diskette  
for: CP/M

Automatic index and table of contents generator.

### MailMerge

MicroPro  
\$ 250.00 Diskette  
for: CP/M

Adds form letter capability to Wordstar.

### Palintir Speller

Palintir Software  
\$ 145.00 Diskette  
for: CP/M

Spelling checker for Palintir Wordprocessor.

### Palintir Wordprocessor

Palintir Software  
\$ 250.00 Diskette  
for: CP/M

Wordprocessor featuring boilerplating, proportional spacing, horizontal scroll.

### Proportional Spacing

Writing Consultants  
\$ 75.00 Diskette  
for: CP/M

Gives proportional spacing to Wordstar files with a daisy wheel printer.

### Propstar

Civil Computing  
\$ 49.95 Diskette  
for: CP/M

Stand alone program that gives proportional spacing to Wordstar files with a daisy wheel printer.

### Punctuation & Style

Oasis Systems  
\$ 125.00 Diskette  
for: CP/M

Punctuation and style checker for wordprocessing files.

### Sensible Speller

Sensible Software  
\$ 125.00 Diskette  
for: CP/M

Random House Dictionary spelling checker for Wordstar.

### Spellbinder

Lexisoft  
\$ 495.00 Diskette  
for: CP/M

Integrated wordprocessor with mail list management and math functions.

### Spellguard

Innovative Software  
\$ 295.00 Diskette  
for: CP/M

Wordstar spelling checker.

### Spellstar

MicroPro  
\$ 250.00 Diskette  
for: CP/M

Spelling checker for Wordstar.

### Synonym Finder

Writing Consultants  
\$ 149.00 Diskette  
for: CP/M

Wordstar and Multimate thesaurus.

### TransText

Information Reduction Research  
\$ 99.00 Diskette  
for: CP/M

Translates wordprocessor text formats.



## WordPatch

Rocky Mountain Software  
\$ 49.00 Diskette  
for: CP/M

Wordstar improvement modification program.

## Wordstar

MicroPro  
\$ 495.00 Diskette  
for: CP/M

The original CP/M word processor, against which all others are judged.

# DATABASE MANAGERS

## Able One Mailing List

Able Data Software  
\$ 29.95 Diskette  
for: CP/M

An enhanced mailing list management program in CP/M. You can print labels in five different formats. Four additional fields in each record for date, telephone number, and two amount fields if desired. Entire roster may be printed and size is limited to disk storage size. Requires 2 drives and 132 column printer.

## Cardbox

Caxton Publishing  
\$ 245.00 Diskette  
for: CP/M

Electronic filing system that emulates a card file.

## Condor

Condor Computer  
\$ 650.00 Diskette  
for: CP/M

Relational database creation program along the lines of dBase II.

## Database 3

Holiday Software  
\$ 50.00 Diskette  
for: CP/M

Inexpensive database and filing program.

## dBase II

Ashton-Tate  
\$ 700.00 Diskette  
for: CP/M

The quintessential programmable database system generator.

## dBase Templates

Impact Information Systems  
\$ 39.00 Diskette  
for: CP/M

Templates to use with dBase II for receivables, payables, inventory, etc.

## dBase Utilities

Hilco Software  
\$ 30.00 Diskette  
for: CP/M

Utilities to use with dBase II that decode, modify, and speed up applications.

## DBPack II

Compu-Draw  
\$ 395.00 Diskette  
for: CP/M

Advanced relational DBMS.

## DBPlus

Software Banc  
\$ 125.00 Diskette  
for: CP/M

Inexpensive DBMS writes DIF files.

## FileBase

EWDP Software  
\$ 125.00 Diskette  
for: CP/M

Variable length fields data manager storing records in the comma delimited format used by most letter-merge programs such as WordStar, Multimate, etc. Menu-driven and a good value.

## FilePro

Small Computer  
\$ 199.00 Diskette  
for: CP/M

DBMS applications generator.

## Filer

Compu-Draw  
\$ 49.00 Diskette  
for: CP/M

Filing and cataloging program.

## Friday!

Ashton-Tate  
\$ 295.00 Diskette  
for: CP/M

Electronic filing system.

## Infostar

MicroPro  
\$ 495.00 Diskette  
for: CP/M

Off the shelf DBMS. Files compatible with Wordstar.

## List Master

Palace Software  
\$ 179.00 Diskette  
for: CP/M

Wordpro-compatible information organizer.

## Notebook

Digital Marketing  
\$ 150.00 Diskette  
for: CP/M

Free-form DBMS.

## Palintir Filer

Palintir Software  
\$ 145.00 Diskette  
for: CP/M

DBMS compatible with Palintir wordprocessor.

## Personal Pearl

Pearlsoft  
\$ 295.00 Diskette  
for: CP/M

Relational DBMS.

## Prospector

Executive Data Systems  
\$ 300.00 Diskette  
for: CP/M

Sales prospect database.

## R:base 4000

Mircorim  
\$ 495.00 Diskette  
for: CP/M

Extensive relational DBMS.



## SeekEasy

Correlational Systems  
\$ 235.00 Diskette  
for: CP/M

Intelligent error-free-input, free-form filing system.

## Selector V

Micro-App  
\$ 450.00 Diskette  
for: CP/M

Relational DBMS with report writer.

## Unifile

Univair Systems  
\$ 195.00 Diskette  
for: CP/M

DBMS with report writer.

# TELECOMPUTING

CP/M

## CP/M Term

Cardinal Software  
\$ :na Diskette  
for: C64 CP/M

CP/M telecommunications program that supports the C64 (with CP/M adapter program) with 1600, 1650, and HES modems at 300 baud. Also supports any RS232 modem (with adapter) at 1200 baud.

# PROGRAMMING / LANGUAGES

CP/M

## XtraTech

Xpert Software  
\$ 19.95 Diskette  
for: CP/M

Debugging utility, featuring scan memory for byte strings, save console output to file, type memory, i/o instructions direct to ports, display parameters, substitute memory, etc. Enhances not replaces other debuggers and stays in memory thru warm boots.

## 68000 Assembler

Quelo  
\$ 595.00 Diskette  
for: CP/M

Cross-assembler for program development for 68000 based systems, like the AMIGA.

## Aztec C II

Manx Software  
\$ 349.00 Diskette  
for: CP/M

C compiler for CP/M with utilities, library, UNIX-type I/O, etc.

## BDS C

BDS Software  
\$ 150.00 Diskette  
for: CP/M

A well established and excellent version of C for CP/M.

## C/80 Mathpak

Software Toolworks  
\$ 29.00 Diskette  
for: CP/M

Adds floats and longs to C/80 compiler.

## C/80

Software Toolworks  
\$ 49.00 Diskette  
for: CP/M

Inexpensive C compiler.

## C80

Zeighty Data  
\$ 45.00 Diskette  
for: CP/M

Another inexpensive C compiler.

## CBASICCompiler

Digital Research  
\$ 500.00 Diskette  
for: CP/M

Advanced structured basic compiler supports Digital's GSX graphics and maybe GEM.

## Cross-assemblers

Avocet  
\$ 250.00 Diskette  
for: CP/M

A full line of cross-assemblers for most cpu's on the market, from 8085 to the 68000.

## Janus ADA

R.R. Software  
\$ 300.00 Diskette  
for: CP/M

Several ADA subsets available.

## Josef

Kobetek Systems  
\$ 45.00 Diskette  
for: CP/M

A new powerful educational programming language for the C=128 in CP/M mode (now being developed by Kobetek Systems) which combines the spirit of the LOGO Turtle with the structure of Pascal.

## LISP/80 Interpreter

Software Toolworks  
\$ 39.95 Diskette  
for: CP/M

Inexpensive LISP interpreter.

## LMI FORTH

Laboratory Microsystems  
\$ :na Diskette  
for: CP/M

FORTH-83 for CP/M systems.

## MasterForth

MicroMotion  
\$ 100.00 Diskette  
for: CP/M

Forth-83.

## Masterful Disassembler

C.C. Software  
\$ 45.00 Diskette  
for: CP/M

Machine code disassembler.

## Microsoft BASIC

MicroSoft  
\$ 395.00 Diskette  
for: CP/M

Combination BASIC compiler and interpreter.

## MTBASICCompiler

Softaid  
\$ 49.95 Diskette  
for: CP/M

Multitasking BASIC compiler with recursion, windows, etc. for Z80.



### MVP FORTH

Mountain View Press  
\$ 150.00 Diskette  
for: CP/M

The quintessential FORTH implementation.

### Nevada BASIC

Ellis Computing  
\$ 29.95 Diskette  
for: CP/M

Basic interpreter with BCD math, built-in editor.

### Nevada COBOL

Ellis Computing  
\$ 29.95 Diskette  
for: CP/M  
COBOL for CP/M.

### Nevada Fortran

Ellis Computing  
\$ 29.95 Diskette  
for: CP/M

Inexpensive introduction to ANSI-66 Fortran.

### Nevada Pascal

Ellis Computing  
\$ 29.95 Diskette  
for: CP/M  
Pascal for CP/M.

### Nevada Pilot

Ellis Computing  
\$ 29.95 Diskette  
for: CP/M  
Pilot for CP/M.

### PL/I 80

Digital Research  
\$ 500.00 Diskette  
for: CP/M

A subset of the mainframe language for a micro environment.

### Ratfor

Software Toolworks  
\$ 39.00 Diskette  
for: CP/M

Inexpensive FORTRAN implementation.

### Runic-80

Starside Engineering  
\$ 39.95 Diskette  
for: CP/M

Forth-like language claimed to be easier to learn and use than Forth.

### Supersoft A

SuperSoft  
\$ 300.00 Diskette  
for: CP/M

Subset of ADA includes approximately 2/3 of ADA.

### Supersoft C

SuperSoft  
\$ 350.00 Diskette  
for: CP/M

Optimized C compiler with 130 library functions included.

### Turbo Pascal

Borland  
\$ 49.95 Diskette  
for: CP/M

Highly praised Pascal for CP/M systems. Toolbox, tutorial package available.

### UO-LISP

Northwest Computer Algorithms  
\$ 49.95 Diskette  
for: CP/M

LISP interpreter and compiler.

### Waltz Lisp

ProCode  
\$ 169.00 Diskette  
for: CP/M

Formidable LISP system for CP/M. Included mini-PROLOG written in LISP.

## UTILITIES

CP/M

### AMX

Kadak Products  
\$ 800.00 Diskette  
for: CP/M

Multitasking executive with language interface.

### ConIX DOS

Computer Helper  
\$ 79.95 Diskette  
for: CP/M

Shell-like front end for CP/M-like UNIX.

### Datasafe

Trigram Systems  
\$ 139.00 Diskette  
for: CP/M

Data security encryption.

### Diagnostics II

SuperSoft  
\$ 125.00 Diskette  
for: CP/M

Checks out your system.

### Eureka!

Disco Tech  
\$ 75.00 Diskette  
for: CP/M

Disk file organization and management.

### Media Master

MDC & Associates  
\$ 29.95 Diskette  
for: CP/M

Disk format conversion program. Might not work on C=128 unless translated.

### Nevada EDIT

Ellis Computing  
\$ 29.95 Diskette  
for: CP/M

Full-screen text editor for program development, etc. Vast improvement on ED.

### P/C Privacy

MicroComputer Telecom. People  
\$ 140.00 Diskette  
for: CP/M

Data encryption program.



## Pack & Crypt

Software Toolworks  
\$ 24.95 Diskette  
for: CP/M

Encrypts and packs disk files.

## Power!

Computing!  
\$ 99.95 Diskette  
for: CP/M

Adds a powerful menu-driven front end to the CP/M system.

## SCG31

C.C. Software  
\$ 75.00 Diskette  
for: CP/M

Source code generator.

## Supermit

Roy Lipscomb/Logic Associates  
\$ 85.00 Diskette  
for: CP/M

CP/M utilities.

## Tutori/o

Roy Lipscomb/Logic Associates  
\$ 31.00 Diskette  
for: CP/M

Animates, debugs, and unleashes BDOS.

## Utl

EWDP Software  
\$ 40.00 Diskette  
for: CP/M

Consolidates frequently used CP/M file functions into a single program with self-typing commands.

## Virtual Volume Manager

MicroTASK  
\$ 44.95 Diskette  
for: CP/M

Disk file management and maintenance package.

## XtraKey

Xpert Software  
\$ 39.95 Diskette  
for: CP/M

Keyboard expansion/redefinition program that allows the user to redefine ordinary keys with long commands (macros) or strings. Can be used with WordStar, dBase II, SuperCalc, etc.

## ZED

Pascal & Associates  
\$ 50.00 Diskette  
for: CP/M

Improved text editor.



## Adventure

Adventure  
\$ 25.00 Diskette \*\*\*  
for: CP/M

The original computer adventure in Colossal Cave.  
(-Staff)

## Best of Wok Talk

Software Toolworks  
\$ 29.95 Diskette  
for: CP/M

200 Chinese recipes.

## Cardinal CP/M Public Domain

Cardinal Software  
\$ 10.00 Diskette  
for: C64 CP/M

CP/M public domain disks for \$10 each.

## Cardio

VetSoft  
\$ 195.00 Diskette  
for: CP/M

ECG analysis for veterinarians.

## CI System

Litek  
\$ 395.00 Diskette  
for: CP/M

Legal firm client tracking system.

## Computer Chef

Software Toolworks  
\$ 29.95 Diskette  
for: CP/M

Personal recipe filer.

## Cramer Public Domain Library

Cramer  
\$ 8.00 Diskette  
for: CP/M

SASE for list. \$8/disk.

## Critical Path Analysis

Siem Software Products  
\$ 70.00 Diskette  
for: CP/M

Business efficiency tool, up to 200 activities and 300 dates.

## Daily Reminder & Calendar

International Computer Product  
\$ 39.00 Diskette  
for: CP/M

Notebook and appointment calendar.

## DynaComp products

DynaComp  
\$ :na Diskette  
for: C64 CP/M

Over 100 software products the C64 and some in CP/M, covering public domain disks, business, games, education, etc. (you name it).

## Elliam Public Domain library

Elliam Associates  
\$ 7.50 Diskette  
for: CP/M

6000 programs on 300 disks. Catalog is \$7.50.

## Fancy Font

SoftCraft  
\$ 180.00 Diskette  
for: CP/M

Create typeset-quality fonts in a variety of styles and point-sizes for print-out to Epson-compatibles. We haven't been able to get this program to work satisfactorily on the C128 to date.  
(-Staff)



## Financial Analysis System

Valuation Systems  
\$ 125.00 Diskette  
for: CP/M

Collection of real estate analysis programs.

## INFO-80

The Software Store  
\$ 395.00 Diskette  
for: CP/M

Application development system with a catchy name.

## National Publ. Domain Library

National Public Domain  
\$ 45.00 Diskette  
for: CP/M

Rent disks for 7 days to copy yourself. \$45.00/92 disks.

## Stock & Trend Analyzer

NewTEK Industries  
\$ 99.00 Diskette  
for: CP/M

Stock charting and analysis.

## Stock Option Planner

TaxCalc Software  
\$ 100.00 Diskette  
for: CP/M

Cost and results of covered call.

## Stock Pricing Model

Kustom Software  
\$ :na Diskette  
for: CP/M

Supercalc overlays for stock market.

## What's for Dinner

Software Toolworks  
\$ 19.95 Diskette  
for: CP/M

200 family recipes.



# AMIGA!

## PRODUCT ROUNDUP!

INTEGRATED  
SOFTWARE

AMIGA

## Enable/Office Manager

Software Group  
\$ :na Diskette  
for: AMIGA

Highly acclaimed, second generation integrated package with word processing, spreadsheet, database, telecommunications and graphics modules. All modules can transfer files between each other as well as share data between other products such as: Lotus 1-2-3, dBase, VisiCalc, Volkswriter, etc. Already considered by many as the best int. package for the IBM PC, Enable should REALLY shine on the AMIGA!

(-Staff)

## Maximillian

Tardis Software  
\$ 195.00 Diskette  
for: AMIGA

Four modules (spreadsheet, wordprocessor, graphics, & terminal). Features 'dynamic paste' (ie: after transferring data from one module to another, changes made in one module are automatically made in the other.) All 4 programs run simultaneously and can be upgraded on a modular basis. Terminal module has unique feature allowing 2 Amigas to be 'slaved' together via modem for interactive use by multiple users.



## BUSINESS ACCOUNTING

### AMIGA

#### Rags to Riches

Chang Laboratories  
\$ :na Diskette  
for: AMIGA

Ledger, Payables, Receivables, and Sales modules handle 5000 accounts and 10,000 transactions. Software is RAM-based for extra speed.

## SPREADSHEETS

### AMIGA

#### CalCraft

Synapse  
\$ :na Diskette  
for: AMIGA

Advanced spreadsheet which features pull down menus and flexible formatting options. Available Sept. 1985.

#### Enable/Calc

Software Group  
\$ :na Diskette  
for: AMIGA

Full featured spreadsheet program with Lotus-like macros, over 50 math functions and up to 8 simultaneously active spreadsheet files in RAM.

## WORDPROCESSING

### AMIGA

#### Enable/Write

Software Group  
\$ :na Diskette  
for: AMIGA

Advanced word processing program for professional users with advanced features like multiple format lines, automatic footnoting, index, and table of content generation, extended character sets, mail merge, etc.

#### TextCraft

Arktronics  
\$ :na Diskette  
for: AMIGA

A 'what you see is what you get' word processor. Offers a choice of up to 4 type styles and three fonts, as well as up to 8 colors for text or background. On-screen menus and 6 templates (preformatted for business letters, resumes, etc.).

## DATABASE MANAGEMENT

### AMIGA

#### Enable/List

Software Group  
\$ :na Diskette  
for: AMIGA

Powerful, flexible DBMS that can handle up to 1301 bytes of info with over 256 fields per record.

#### FileBase

EWDP Software  
\$ :na Diskette  
for: AMIGA

Variable length fields data manager storing records in the comma delimited format used by most letter-merge programs such as WordStar, Multimate, etc. Menu-driven and a good value.

## GRAPHICS

### AMIGA

#### Amiga Draw!

Aegis Development  
\$ :na Diskette  
for: AMIGA

Drafting and design tool to create accurate and detailed drawings of anything you can imagine and then transfer those images to plotters or printers. Supports windowing, zoom, undo, mouse, keyboard, tablets, pull down menus and more.

#### Deluxe Video Construction Set

Electronic Arts  
\$ :na Diskette  
for: AMIGA

Creates animated videos with cartoon-like graphics and sound effects. Accepts data from other EA software.

#### Graphcraft

Island Graphics  
\$ :na Diskette  
for: AMIGA

Paint package that drives 32 high resolution colors. Allows users to airbrush with variable density and diameter, spread color, repeat objects, and cycle colors.

#### Moviecrafft

Island Graphics  
\$ :na Diskette  
for: AMIGA

Advanced animation effects and image manipulation program using icons and pull down menus for ease and speed. System uses 'tweening' technique to produce animated sequence without having to read from disk.

#### Presentationcraft

Island Graphics  
\$ :na Diskette  
for: AMIGA

Allows the user to produce shaded 3-D objects, explode and expand bar and pie graphs plus variety of special effects for business presentations.



## Print Shop

Broderbund  
\$ :na Diskette  
for: AMIGA

AMIGA version of the ever popular greeting card, sign, banner, letterhead printer program. Available in Nov. 1985.

## MUSIC

AMIGA

### Harmony

Cherry Lane Technologies  
\$ :na Diskette  
for: AMIGA

Uses artificial intelligence to create musical accompaniment which follows the musician's tempo rather than compelling the user to follow the recorded music's tempo. Up to 5 lines of pre-recorded music can be stored.

### Musicaft

Everyware  
\$ :na Diskette  
for: AMIGA

Turns the AMIGA into a professional 4 voice synthesizer and sequencer. Allows the user to play the computer keyboard like a piano.

### Scorewriter

Cherry Lane Technologies  
\$ :na Diskette  
for: AMIGA

Allows musicians to score and print music and exploits the graphics and sound capability of the AMIGA for functional ease.

### Texture

Cherry Lane Technologies  
\$ :na Diskette  
for: AMIGA

A modular recording program that allows flexible editing and easy manipulation of musical text. Musical compositions can be recorded as a series of small pieces then linked together to form a complete composition.

## TELECOMPUTING

AMIGA

### T-Modem

Tecmar  
\$ 600.00  
for: AMIGA

A Hayes compatible modem with selectable 300, 1200, and 2400 bauds. Provides touch tone decoding, off hook detection and interfaces to audio circuits within the AMIGA. Modem fits neatly under a standard phone.

### Telecraft

Software 66  
\$ :na Diskette  
for: AMIGA

Easy to use, but sophisticated communications and terminal emulation package.

## PROGRAMMING

AMIGA

### Lattice C Compiler

Lattice  
\$ :na Diskette  
for: AMIGA

Allows programs designed to run on other PC operating systems to work on the AMIGA. It uses a native C AMIGA compiler language to generate an AMIGA object format. Fully compatible with Kernighan & Ritchie code.

### Lattice C CrossCompiler/MSDOS

Lattice  
\$ :na Diskette  
for: AMIGA

Allows programs developed for the AMIGA to run on IBM pc's. It uses an IBM MS-DOS source to generate an AMIGA target system. Fully compatible with Kernighan & Ritchie code.

### Lattice C CrossCompiler/UNIX

Lattice  
\$ :na Diskette  
for: AMIGA

Allows programs developed for the AMIGA to run on UNIX-type machines. It uses a Sun UNIX 4.2 source to generate an AMIGA target system. Fully compatible with Kernighan & Ritchie code.

### Lattice C CrossCompiler/VAX

Lattice  
\$ :na Diskette  
for: AMIGA

Allows programs developed for the AMIGA to run on VAX-type machines. It uses a VAX source to generate an AMIGA target system. Fully compatible with Kernighan & Ritchie code.

### LMK

Lattice  
\$ :na Diskette  
for: AMIGA

Similar to UNIX-Make. Once the user specifies the relationships of various elements in the system (ie. source modules, object modules) in a dependent file, the 'LMK' command initiates the automatic rebuilding for the system in other files.

### LSE

Lattice  
\$ :na Diskette  
for: AMIGA

Acts as a screen editor allowing users to input commands in several languages. Multi-windowing, back-up directories and user defined command terms.

### TMN

Lattice  
\$ :na Diskette  
for: AMIGA

Provides text management utilities which allow the user to search simple or complicated files. Special commands allow users to see even minimal differences between two files and to automatically modify a file by user instructions.





## ABasic

MicroSoft  
\$ :na Diskette  
for: AMIGA

The version of basic supplied with the AMIGA. Provides a programming environment exploiting all of the unique features of the AMIGA (multiple windows and screens, animation, 4 voices, menus, etc.).

## Amiga Assembler/Linker

Metacomco  
\$ :na Diskette  
for: AMIGA

A Motorola standard macro-assembler with a corresponding linker.

## Amiga DOS

Metacomco  
\$ :na Diskette  
for: AMIGA

Multi-tasking operating system with many powerful features, like sophisticated hierarchical filing system with dynamic file allocation and no restrictions on size.

## Cambridge LISP 68000

Metacomco  
\$ :na Diskette  
for: AMIGA

A programming language designed for work in artificial intelligence, incorporating an interpreter, compiler and structure editor.

## MCC Pascal 68000

Metacomco  
\$ :na Diskette  
for: AMIGA

Full ISO 7185 standard Pascal single pass compiler combines both speed and efficiency and is suitable for professional and educational use.

## Metacomco BASIC

Metacomco  
\$ :na Diskette  
for: AMIGA

A BASIC interpreter for all general purpose BASIC programming, designed to take advantage of the graphics and sound capabilities of the AMIGA.

## TLC-LOGO

Lisp Company  
\$ :na Diskette  
for: AMIGA

Provides a continuous learning path from general purpose programming to use of A.I. concepts in programming. Uses a LISP dialect that combines the notion of 1st class objects and the semantics of LISP into a simple LOGO syntax.

## Turbo Pascal

Borland  
\$ :na Diskette  
for: AMIGA

Highly praised Pascal system. Toolbox and tutorial package available.

## Utl

EWDP Software  
\$ :na Diskette  
for: AMIGA

Consolidates frequently used CP/M file functions into a single program with self-typing commands.

## ARCADE & ACTION GAMES

### AMIGA

## Archon

Electronic Arts  
\$ :na Diskette  
for: AMIGA

Played on a board where icons occupy the squares, and in an arena where icons race around trying to zap each other, the object of Archon is to occupy all six power points (they move around, increasing the difficulty). For 1 or 2 players.  
(-B.D.)

## Arctic Fox

Electronic Arts  
\$ :na Diskette  
for: AMIGA

You command the advanced and deadly tank of the future. A first person tank combat game with all the stunning 3-D graphics and sound only the Amiga can do.

## F-15 Strike Eagle

MicroProse Software  
\$ :na Diskette  
for: AMIGA

A captivating game experience flying a fighter bomber. Not as finicky and crash prone as some flight simulators (this plane is considered landed by just coming close to your base). The real action and pleasure of this game is combat flying, bombing, and dog fighting. The cockpit is detailed and the action is convincing. Four skill levels.  
(-B.D.)

## Marble Madness

Electronic Arts  
\$ :na Diskette  
for: AMIGA

Outstanding translation of the arcade version. Wonderful graphics and endless play. Definitely the next generation in video game standards!

## Return to Atlantis

Electronic Arts  
\$ :na Diskette  
for: AMIGA

3-D undersea adventure with realistic sound effects.

## Skyfox

Electronic Arts  
\$ :na Diskette  
for: AMIGA

Realistic combat flight simulator with on-board flight radar. You can't crash yourself, but you can get blown to bits.

## CONVENTIONAL GAMES

### AMIGA

## Sargon III

Hayden  
\$ :na Diskette  
for: AMIGA

Features 9 levels of play and a library of 68,000 moves. Provides instruction for the novice and brain teasing chess problems for the master. AMIGA version available 1st quarter 1986.



# TEXT AMIGA ADVENTURES

## Cut Throats

Infocom  
\$ :na Diskette  
for: AMIGA

This text adventure places you on an out-of-the-way island populated by some disreputable characters. You're a diver for hire and they hire you to recover some sunken treasure. Standard level.

## Deadline

Infocom  
\$ :na Diskette  
for: AMIGA

You are the detective solving a murder in this exciting adventure. Very realistic characters with distinct personalities. Expert level.

## Enchanter

Infocom  
\$ :na Diskette  
for: AMIGA

In the Zorkian tradition, you are a beginning magician whom Fate has chosen to do singlehanded combat with a dark and fierce power. Standard level.

## Infidel

Infocom  
\$ :na Diskette  
for: AMIGA

Another Infocom text adventure where you are marooned by your followers in the heart of the Egyptian desert. You have come in search of a great lost pyramid and its untold riches. Advanced level.

## Planetfall

Infocom  
\$ :na Diskette  
for: AMIGA

You are teleported forward in time to a Stellar Patrol ship, where your rank is Ensign 7th Class (the lowest). The ship explodes and you are jettisoned to a deserted and mysterious world, where you must dare its dangers and try to save it. Standard level.

## Sorcerer

Infocom  
\$ :na Diskette  
for: AMIGA

Another text adventure that poses you with a mystical clue and a magical tour thru the darker side of the Zorkian Empire. Advanced level.

## Starcross

Infocom  
\$ :na Diskette  
for: AMIGA

Text adventure with a science fiction theme in the year 2186, where you are destined to rendezvous with a gargantuan starship from the outer fringes of the galaxy. Expert level.

## Suspect

Infocom  
\$ :na Diskette  
for: AMIGA

This time you are the suspect, and Sgt. Duffy wants you! You must solve the murder to clear your name and do it amidst the activity of masked ball in a mansion. Advanced level.

## Suspended

Infocom  
\$ :na Diskette  
for: AMIGA

Unique interactive-prose adventure from the company that brought you Zork and Deadline. In this one you command 6 robots each with distinct personalities and various abilities in an effort to avoid world wide catastrophe. Includes a map for tracking your 6 robots. Expert level.

## Witness

Infocom  
\$ :na Diskette  
for: AMIGA

Spine-tingler of a blackmail case that turns into murder before your eyes, and anyone from the knockout heiress to the poker-faced Oriental butler could be the killer. Standard level.

## Zork I, II, III

Infocom  
\$ :na Diskette  
for: AMIGA

The Great Underground Empire confronts you with perils and predicaments ranging from the mystical to the macabre, as you strive to discover the Treasures of Zork and escape with them and your life. Zork I is of standard level and II & III are advanced levels.

# GRAPHIC AMIGA ADVENTURES

## Deja Vu

Mindscape  
\$ :na Diskette  
for: AMIGA

Graphic text adventure that transports you into a suspense filled 1940's Hollywood mystery. Hidden clues are revealed by clicking a mouse. Players view several aspects of the adventure simultaneously with the AMIGA's windowing.

## Seven Cities of Gold

Electronic Arts  
\$ :na Diskette  
for: AMIGA

An adventure game of discovering the new world in the late 1400's. Carefully balance your resources between the number of ships, men, supplies and valuables to trade or give the natives. You'll like this one if you like exploring and can negotiate with unpredictable natives.  
(-B.D.)

# STRATEGY & AMIGA SIMULATION

## Acroject

MicroProse Software  
\$ :na Diskette  
for: AMIGA

Allows those pilots who have soloed in Solo Flight to now pilot their own personal jet, the BD5-J. You can then participate in a Decathlon of Sport Aviation events, including spot landings, ribbon cuts, acrobatics, and more. High performance flying, including rolls, loops, Immelmans all in 3-D.



## Crusade in Europe

MicroProse Software  
\$ :na Diskette  
for: AMIGA

From D-day to the Battle of the Bulge, you will have the chance to replay the hands dealt by history in this real-time strategic war-game simulation. A large scrolling map shows terrain and troops with your choice of symbolic or pictorial game pieces. Very easy to start playing, but amply complex for crustier war-gamers. Sound effects and graphics are just right.

(-B.D.)

## Kennedy Approach

MicroProse Software  
\$ :na Diskette  
for: AMIGA

Air traffic controller that supports several advanced and unique features, that help make it work (i.e. good quality speech synthesis and indication of the altitude of planes, giving you 3-d visual information on a 2-d game grid). If you aren't getting enough tension in your life, this should help.

(-B.D.)

## One on One

Epyx  
\$ :na Diskette  
for: AMIGA

1 or 2 players may switch personalities with Dr. J or Larry Bird. All elements of the game have been included through excellent programming: dribbling, shooting, rebounding, stealing, blocking, 180-degree spins & slam dunks (easy on the backboard...its breakable). Referee calls the fouls, janitor sweeps up broken backboards, and instant replays on good moves.

(-B.D.)

## Radar Raiders

Sublogic  
\$ :na Diskette  
for: AMIGA

Simulates a high performance jet aircraft flown in test pilot and combat game modes. Exploits graphics and sound capabilities of the AMIGA (very dynamic sound when linked to a stereo system). Available 4th quarter 1985.

## Silent Service

MicroProse Software  
\$ :na Diskette  
for: AMIGA

A submarine simulation of WWII submarine combat in the Pacific. Features multi-sub locations including engine room, conning tower and ship's bridge.

## Solo Flight

MicroProse Software  
\$ :na Diskette  
for: AMIGA

Real-time light airplane simulation, with 3-D terrain graphics, multiple airports, varying conditions, full instrumentation, air-mail game, VFR & IFR flying.

(-B.D.)

## EDUCATIONAL GAMES

AMIGA

## Halley Project

MindScape  
\$ :na Diskette  
for: AMIGA

Players must successfully complete a series of missions, navigating by the stars, in this authentic real-time simulation of the solar system. Qualifiers may participate in a special secret mission.

## Keyboard Cadet

MindScape  
\$ :na Diskette  
for: AMIGA

Trains users to type on the computer keyboard, excellent graphics and ease of use make it appropriate for users age 8 and up.

## MISCELLANEOUS SOFTWARE

AMIGA

## AMIGA Tutor

Mindscape  
\$ :na Diskette  
for: AMIGA

Illustrates the AMIGA's graphics capabilities and offers a chapter-by-chapter look at the machines major features.

## PERIPHERALS & HARDWARE

AMIGA

## T-Card

Tecmar  
\$ 400.00  
for: AMIGA

A multi-functional expansion card with up to 1M byte of memory. Features a serial port, clock/calendar with battery backup, hard disk interface, parallel printer port and additional power supply.

## T-Disk

Tecmar  
\$ 1000.00  
for: AMIGA

A 20Mbyte compact 3.5 inch high hard disk drive. Comes with its own cabinet for external mounting and a shielded cable for connecting it to T-Card thru an SASI port. The drive's light panel indicates power file selected and read/write status.

## T-Tape

Tecmar  
\$ 600.00  
for: AMIGA

A 20Mbyte tape backup for a hard disk drive. Comes as a stand alone unit with its own power supply. T-Tape can be linked to an AMIGA thru a floppy interface port. The device's light panel gives readouts on track number, tape direction, read/write status and power.



## Amiga Eye

A-Squared Systems  
\$ :na Diskette  
for: AMIGA

Color video digitizer where the user can vary hue, saturation, luminance and colors (over 4,000). Record up to 1 second of imaging and replay the recreated images in 'instant replay', slow motion, stop action, or high speed modes.

## Penmouse+ Input Device

Kurta Corp.  
\$ :na Diskette  
for: AMIGA

Emulates both a mouse and graphics tablet. Uses an electronic method of movement detection instead of a mechanical one to achieve a higher measure of accuracy. The pen is cordless for ease of use and has a built-in power supply.

## Space Pen

Soniture  
\$ 175.00 Diskette  
for: AMIGA

A 3-D input device that lets you send to ultrasonic signals to the computer. Including sampler software.



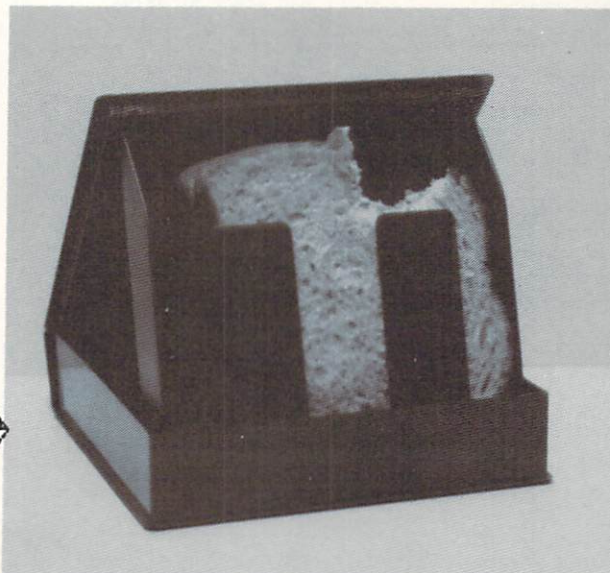
# DOUBLE-TAKE DOUBLE-TAKE



INFO's very own **Marty Amorin** (apparently not making ends meet with what he makes at INFO) recently went behind our executive backs and submitted his original idea for severe-weather portable diskette storage (a RubberMaid sandwich container) to RUN Magazine for inclusion in their MAGIC column. Pictured here are Marty and his big \$10 check from RUN, as well as a close-up of the container in use.



Embarrassed at our discovery of his unfaithfulness, (and threatened with the possibility of having his vacation scheduled during the week the Amiga arrives) Marty decided to give us an even better tip (see photo, right) with which, he had originally hoped to win RUN'S \$20 or \$50 special award. Sorry about the photo, but Marty got hungry during the photo session.



# INFO





# INDEX TO PRODUCT ROUNDUP VENDORS

(M)agreeable Software  
5925 magnolia ln.  
plymouth mn 55442  
612-559-1108

1040 Plus  
6730 e. mcdowell #103  
scottsdale az 85257  
602-941-3407

3R Import  
731 james st.  
suite 405  
syracuse ny 13203  
315-475-2224

A-Squared Systems  
7200 sayre drive  
oakland ca 94611

Abacus Software  
po box 7211  
2201 kalamazoo st. s.e.  
grand rapids mi 49510  
616-241-5510

Able Data Software  
po box 86923  
station b  
north vancouver bc

Academy Software  
po box 6277  
san rafael ca 94903  
415-499-0850

Access Software  
925 e. 900th south  
salt lake city ut 84105  
801-532-1134

Acco  
770 s. acco plaza  
wheeling il 60090  
800-232-7882

Activision  
drawer 7286  
mountain view ca 94039

Adam, Cobb & King  
655 john muir dr. #e411  
san francisco ca 94132  
408-224-4069

Addison Information Systems  
512 king st. east  
third floor  
toronto on m5a-1m1  
416-864-9240

Adventure  
po box 3435  
longwood fl 32750  
305-862-6917

Aegis Development  
2210 wilshire blvd.  
suite 277  
santa monica ca 90403  
213-306-0735

After Six Software  
po box 13015  
portland or 97213

Algo-Rhythm Software  
176 mineola blvd.  
mineola ny 11501  
516-294-7590

Alien Group  
27 w. 23rd st.  
new york ny 10010

Alpine Data  
635 main st.  
montrose ca 81401  
303-249-1400

Amaray  
14935 n.e. 95th st.  
redmond wa 98052  
206-881-1000  
800-4-amaray

American Educational Computer  
2450 embarcadero way  
palo alto ca 94303  
415-494-2021  
800-222-2811

American Peripherals  
141 cortland st.  
lindenhurst ny 11757  
516-226-5849

Apricorn  
7050 convoy ct.  
san diego ca 92111

Aquarian Software  
PO Box 22184  
Portland OR 97222  
503 654-2641

Arkrtronics  
520 e. liberty st.  
ann arbor mi 48104  
313 769-7253

Artificial Intelligence  
921 north la jolla ave.  
los angeles ca 90046  
213-656-7368

Artworx Software  
150 n. main st.  
fairport ny 14450  
716-425-2833  
800-828-6573

Ashton-Tate  
10150 w. jefferson blvd.  
culver city ca 90230  
213-204-5570

Atarisoft  
po box 2943  
so. san francisco ca 94080  
408-745-2000

Avalon Hill  
4517 harford rd.  
baltimore md 21214  
301-254-9200  
800-638-9292

Avocet  
po box 490  
10 summer st.  
rockport me 04856  
207-236-9055

B.E.S.T.  
box 852  
mc minnville or 97128  
503-472-9512

B128 Users Group  
c/o marlin schwanke  
432 n. 'm' st. apt. c  
lompoc ca 93436  
805-735-6931

Basement Boys Software  
po box 30901  
portland or 97230  
503-256-5506

Basix  
3463 state st.  
suite 1541d  
santa barbara ca 93105  
805-687-1541

Batteries Included  
186 queen st. west  
toronto on m5v-1z1  
416-596-1405

BCA  
#104  
874 van nuys blvd.  
panorama city ca 91402  
818-891-0849

BDS Software  
po box 2368  
cambridge ma 02238  
617-576-3828

Bible Research Systems  
2013 well branch pkwy. #304  
austin tx 78728  
512-251-7541

BitCards  
30 w. service rd.  
champlain ny 12919  
514-274-1103

Blue Chip  
6740 eton ave.  
canoga park ca 91303

Boreas Products  
po box 16961  
colorado springs co 80935  
303-593-1274

Borland  
4113 scotts valley dr.  
scotts valley ca 95066  
408-438-8400

Boston Educational  
78 dartmouth st.  
boston ma 02116  
617-536-5116

Briley Software  
box 2913  
livermore ca 94550  
415-455-9139

Broderbund  
17 paul dr.  
san rafael ca 94903  
415-479-1170

Business Systems & Conversions  
po box 50505  
indianapolis in 46250  
317-842-5385

C&B Enterprises  
dept c64f  
po box 16252  
panama city fl 32405  
904-784-7125

C.C. Software  
suite 106  
2564 walnut blvd.  
walnut creek ca 94596  
415-939-8153

C.Itoh  
1011 francisco st.  
torrance ca 90502  
213-327-5939  
800-423-0300

Cardco  
300 south topeka  
wichita ks 67202  
316-267-6525

Cardinal Software  
13646 jefferson davis hwy.  
woodbridge va 22191  
800-762-5645

Caxton Publishing  
10-14 bedford st.  
covent garden  
london, england wc2e-9he

CBS Software  
one fawcett pl.  
greenwich ct 06836  
203-622-2500

Central Point  
9700 s.w. capitol hwy. #100  
portland or 97219  
503-244-5782



# INDEX TO PRODUCT ROUNDUP VENDORS

CGRS Microtech  
po box 102  
langhorne pa 19047  
215-757-0284

Chang Laboratories  
5300 stevens creek blvd.  
san jose ca 95129

Cheatsheet Products  
po box 111368  
pittsburgh pa 15238  
412-781-1551

Cherry Lane Technologies  
110 midland ave.  
port chester ny 10573

City Software  
735 w. wisconsin ave.  
milwaukee wi 53233  
414-291-5125

Civil Computing  
suite 1  
2111 research dr.  
livermore ca 94550  
415-455-8086

Clockwork Computers  
4612 holly ridge rd.  
rockville md 20853  
301-924-5509

CMS Software  
2204 camp david  
mesquite tx 75149  
214-289-0677

Coast Bulletin Board  
33175 oceanview dr.  
fort bragg ca 95437  
707-964-4440

CodeWriter  
5605 w. howard st.  
niles il 60648  
800-621-4109

Columbia Software  
5461 marsh hawk  
po box 2235  
columbia md 21045  
301-997-3100

Comal Users Group  
6041 monona dr.  
madison wi 53716  
608-222-4432  
800-356-5324

Commodore  
1200 wilson dr.  
west chester pa 19380  
215-431-9100  
800-247-9000

Commodore Publications  
1200 wilson dr.  
west chester pa 19380  
800-345-8112

Comprehensive Software  
2316 artesia blvd. suite g  
redondo beach ca 90278  
213-214-1461

Compu-Draw  
1227 goler house  
rochester ny 14620  
716-454-3188

compumed  
po box 6427  
salinas ca 93912  
408-758-2436

CompuServe  
po box 20212  
5000 arlington centre blvd.  
columbus oh 43220  
614-457-0802  
800-848-8199

Compute Publications  
circulation dept.  
po box 5406  
greensboro nc 27403  
919-275-9809  
800-334-0868

Computer Accessories  
1135 columbus  
bakersfield ca 93305  
805-872-4488

Computer Case  
3947 danford square  
columbus oh 43220  
614-876-1784  
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Computer Continuum  
75 southgate ave. #6  
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san leandro ca 94577  
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Computer EditType  
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509 cathedral parkway  
new york ny 10025  
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Computer Helper  
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parkchester station ny 10462  
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Computer Software Associates  
44 oak st.  
the silk mill  
newton upper falls ma 02164  
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Computer Specialties  
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melbourne fl 32902  
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Computing!  
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san francisco ca 94123  
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Computron Business Systems  
1139 s.w. 11th ave.  
portland or 97205  
503-224-2220

Computronics  
50 n. pascack rd.  
spring valley ny 10977  
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Comspec  
153 bridge land ave. unit 5  
toronto on m6l-2y6  
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Comtel Group  
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ann arbor mi 48104  
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Consolink  
1275 sherman dr.  
longmont co 80501  
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vallejo ca 94590  
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los angeles ca 90045  
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Control Corp of America  
po box 2154  
elkhart in 46515  
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rancho palos verdes ca 90274  
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eugene or 97402  
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columbus oh 43228

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11222 richmond  
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suite b10  
redondo beach ca 90278  
213-318-2561

Data Base Research  
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12687 west cedar dr.  
lakewood co 80228

Data Share  
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wichita ks 67211  
316-264-6118

Datamost  
19821 nordhoff st.  
northridge ca 91324  
818-709-1202

Datasoft  
19808 nordhoff pl.  
chatsworth ca 91311

Daybreak Software  
1951 grand ave.  
baldwin ny 11510  
800-645-3739

Digital Devices  
430 - 10th st. n205  
atlanta ga 30318  
800-554-4878

Digital Marketing  
suite 6  
23633 boulevard cir.  
walnut creek ca 94595  
415-938-2880

Digital Research  
po box 579  
160 central ave.  
pacific grove ca 93950

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# INDEX TO PRODUCT ROUNDUP VENDORS

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10636 main st. suite 414  
bellevue wa 98004  
206-883-9257

DMC Software  
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clinton ia 70722  
504-683-9897

Don Peterson  
2645 e. southern a326  
tempe az 85282

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suite b-150  
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winston-salem nc 27106  
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hamilton mt 59840  
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2755 campus dr.  
san mateo ca 94403  
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Electronic Lab Industries  
100 w. 22nd st.  
box 7167  
baltimore md 21218  
301-366-8138

Electronic Software Inc.  
401 s. woodward suite 441  
birmingham mi 48011  
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woodland hills ca 91367  
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Ellis Computing  
3917 noriega st.  
san francisco ca 94122  
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En-Tech  
po box 881  
sun valley ca 91352  
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Engrsoft  
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benton ky 42025

Entrepro  
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sunnyvale ca 94089  
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2780 lomita blvd.  
torrance ca 90505  
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sunnyvale ca 94089  
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northridge ca 91323

EWDP Software  
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indianapolis in 46240  
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anaheim ca 92805  
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Executive Data Systems  
suite 116  
290 interstate north  
atlanta ga 30339  
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casselberry fl 32707

F/22 Press  
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Fabtronics  
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brockport ny 14420

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new york ny 10017  
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fischer america  
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fairfield nj 07006  
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glen ellyn il 60137  
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FS! Software  
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minneapolis mn 55407  
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800-328-0145

Full Circle Software  
po box 1373  
dayton oh 45401  
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chapel hill nc 27514  
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FYI  
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austin tx 78755  
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G&G Software  
610 park blvd.  
austin tx 78751  
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Gamestar  
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sanata barbara ca 93101  
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cambridge ma 02139  
617-491-3393  
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Generic Software  
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190 timber / dept. 20  
marquette mi 49855  
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Genesis Computers  
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glendale ca 91205  
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George Earl  
1302 s. gen mc mullen  
san antoni tx 78237  
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mississauga on l5l-1x2  
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the dalles or 97058  
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louisville ky 40222

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hasbrouck heights nj 07604  
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collinsville il 62234  
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brisbane ca 94005  
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tallmadge oh 44278  
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Hilco Software  
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# INDEX TO PRODUCT ROUNDUP VENDORS

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Impact Information Systems  
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roswell ga 30076  
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chatsworth ca 91311  
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san jose ca 95123  
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cambridge ma 02138

Information Reduction Research  
1538 main st.  
concord ma 01742  
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san diego ca 92138  
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Innovative Software  
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mento park ca 90066

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miami fl 33157  
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Integrated-Software Systems  
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ames ia 50010  
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Intelligent Software  
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san anselmo ca 94960  
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kennewick wa 99336  
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los angeles ca 90004  
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east texas pa 18046  
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580 parrot st.  
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bethlehem pa 18017  
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stony brook ny 11790  
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4610 s. 35th st.  
phoenix az 85040

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665 pacific view dr.  
san diego ca 92109  
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san francisco ca 94123  
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23318 second ave.  
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palo alto ca 94303  
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atburg vt 05440  
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tallmadge oh 44278

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philadelphia pa 19131  
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kent wa 98032  
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shrewsbury ny 07701  
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222 third st.  
cambridge ma 02142  
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Marshall Software  
19 south center st.  
marshalltown ia 50158  
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Marshview Software  
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sackville nb e0a-3c0  
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Mastersoft  
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bend or 97709  
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MDC & Associates  
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MegaSoft Ltd.  
po box 1080  
battle ground wa 98604  
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# INDEX TO PRODUCT ROUNDUP VENDORS

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**Metacomco**  
201 hoffman ave.  
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406 windsor ln.  
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**Michael Crick**  
2845 - 140th ave. n.e.  
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**Micro Business Applications**  
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dallas tx 75229  
800-527-5285

**Micro-Ap**  
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culver city ca 90230  
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**MicroComputer Telecom. People**  
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San Diego CA 92129  
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boise id 83706  
208-383-4000

**MicroPro**  
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dept. 2000  
san rafael ca 94903

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120 lakefront dr.  
hunt valley md 21030  
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**MicroSignal Press**  
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**MicroSoft**  
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bellevue wa 98004

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champaign il 61820  
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**Midwest Micro**  
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kansas city mo 64114  
816-333-7200

**Midwest Software**  
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farmington mi 48024  
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Victoria BC V8V 4V2  
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ogden ut 84403  
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2102 business center dr.  
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vista ca 92083  
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**Omnitronix**  
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anaheim ca 92807  
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7701 wilshire place dr.  
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Dept. N8  
PO Box 95844  
Seattle WA 98145  
206 524-1464

**Paradigm Consultants**  
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39243 liberty st.  
fremont ca 94538  
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50 dunham rd.  
beverly ma 01915  
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# INDEX TO PRODUCT ROUNDUP VENDORS

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2807 oregon ct. #f-3  
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Peachtree Software  
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3445 peachtree rd.  
atlanta ga 30326  
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Pearlsoft  
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wilsonville or 97070  
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Penguin Software  
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po box 311  
geneva il 60134  
312-232-1984

Perfas  
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sharon ct 06069  
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Performance Micro Products  
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canton ma 02021  
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Peripheral Systems of America  
2526 manana dr. suite 209  
dallas tx 75220  
214-956-7866

Personal Peripherals  
merric park, suite 120  
930 n. belton  
irving tx 75061  
214-790-1440

Playground Software  
po box 3470  
dept. c  
chapel hill nc 27514  
800-334-soft

PlayNet  
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wynantskill ny 12198  
800-playnet

Powerline Software  
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new hartford ny 13413

PractiCorp International  
the silk mill  
44 oak st.  
newton upper falls ma 02164  
617-965-9870

Print Technik USA  
bowitz international  
3140 polaris ave, suite 8  
las vegas nv 89102  
702-362-3690

Pro-Line  
755 the queensway east  
unit 8  
mississauga on l4y-4c5  
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ProCode  
15930 s.w. colony pl.  
portland or 97224  
800-547-4000

Professional Software  
51 fremont st.  
needham ma 02194  
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Professor Jones  
1940 w. state st.  
boise id 83702  
208-342-6939

Programmer's Institute  
div. of future house  
po box 3470  
chapel hill nc 27514  
919-967-0861

Progressive Peripherals  
464 kalamath st.  
denver co 80204  
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Pterodactyl Software  
200 bolinas rd. #27  
po box 538  
fairfax ca 94930  
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west milton oh 45383  
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Quantum Leap  
4214 arden way  
san deigo ca 92103  
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Quantum Software  
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lake park fo 33403  
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seattle wa 98119  
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QuickSilva  
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san antonio tx 78216  
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R & L Products  
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los angeles ca 90026  
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havertown pa 19083  
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R.R. Software  
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madison wi 53701  
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fall river ma 02720  
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chichester nh 03263

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st. louis mo 63121  
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bayview plaza  
10610 bayview  
richmond hill on l4c-3n8  
416-884-4165

Right On Programs  
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huntington ny 11743  
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bloomington mn 55438  
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walnut creek ca 94596  
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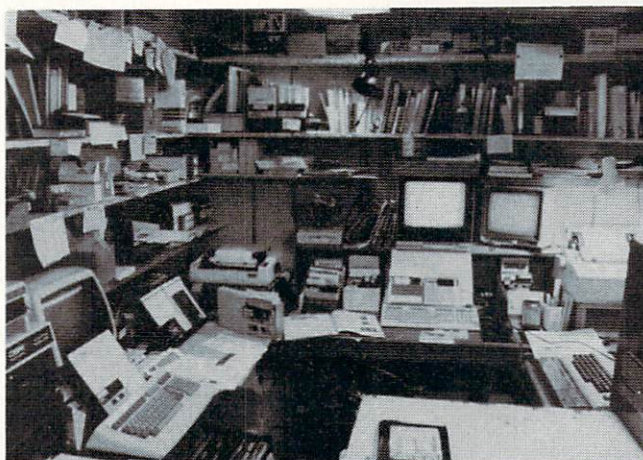
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## CONTEST

## CONTEST



Pictured here is a shot of the editor's work area (about 1/4 of INFO's international secret headquarters). Some people say it's pretty outrageous, but we bet some of you use or have seen even more amazing installations. We are simply looking for some interesting photos of people's Commodore computing areas, and we are willing to give away a computer for the best photo, and (as usual) erg=boards with erg=card sets to the five best runners-up.

What kind of computer? Well, we found another PLUS/4 in a drawer the other day. I thought we had gotten rid of them all, but here we go again. Actually, these make nice collectors' items, and may be worth some money someday, if you hang on to one & keep it in mint condition.

What kind of photos are we looking for? We'll know when we see it: the winning photo could be the tidiest, the most cluttered, the wildest, the most costly, the most equipment-laden, the most complicated, the most efficient-looking, or any number of other extremes which may exist. As usual, our choice will be sudden and final.

Send photos (and explanations, if needed) to:

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Entries must be postmarked no later than **October 20, 1985**. Photos will become the property of INFO Publications, Inc., and will not be returned. Winners will be notified by mail. Prizes will be shipped UPS. Please write your name, street address (no PO Boxes please), and phone number on the back of your photo.

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- Variables at defined location
- Simple Machine Language interface
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### EXECUTIVE

- Command oriented, with line editing
- Memory resident at all times
- Allows multiple user programs in memory at once
- Function key definitions
- Program abort and pause
- 22 Resident system commands, 8 user-defined resident commands, no limit on disk commands
- Prior command recall facility
- I/O Re-direction to disk or printer or from disk or keyboard
- File system management commands
- Memory map, set and display commands
- Batch job file support

### EDITOR

- Full-screen, cursor driven
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- Line insert, delete, search
- String search and replace
- Block copy, move, delete & write to/read from file
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### LIBRARY

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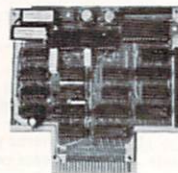
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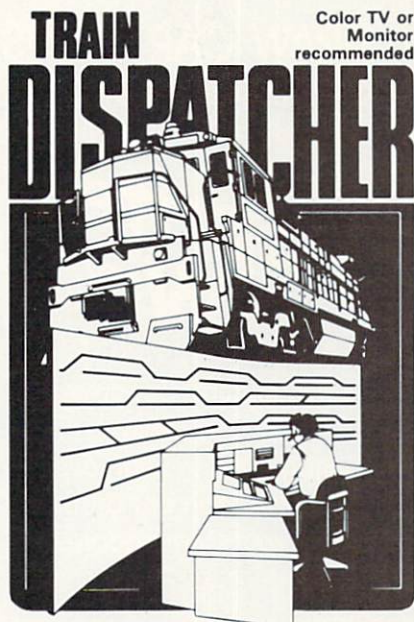


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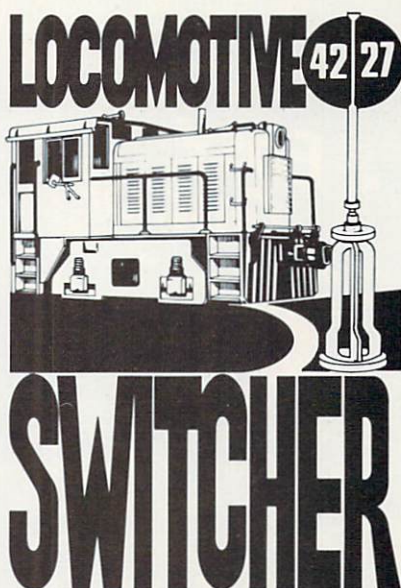
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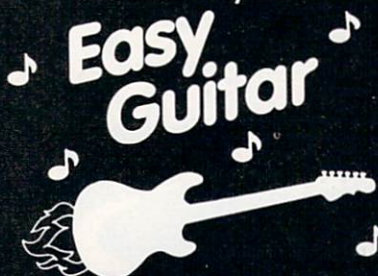
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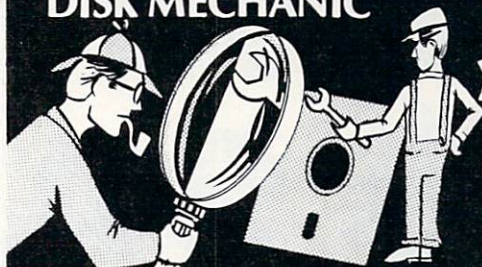
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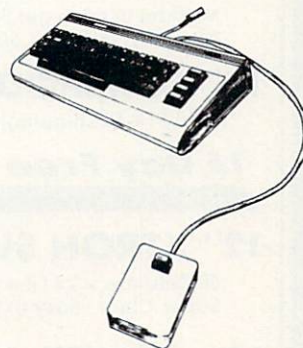
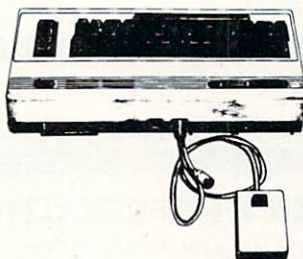
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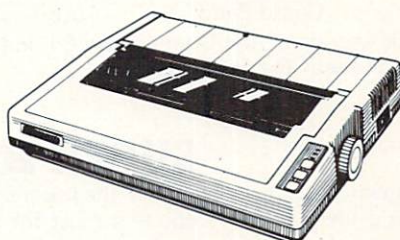
**10" Printer**

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**10" Comstar 10X** — This Bi-directional Tractor/Friction Printer prints standard sheet 8½"x11" paper and continuous forms or labels. High resolution bit image graphics, underlining, horizontal tab setting, true lower descenders, with super scripts and subscripts, prints standard pica, compressed, expanded, block graphics, etc. Fantastic value. (Centronics parallel interface.)

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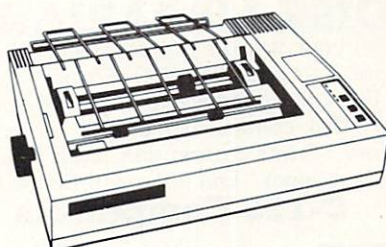
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**10" Comstar 160+ High Speed** — This Bi-directional Tractor/Friction Printer combines the above features of the 10" Comstar 10X with speed (150-170 cps) and durability. Plus you get a 2K buffer, 96 user definable characters, super density bit image graphics, and square print pins for clearer, more legible print (near letter quality). This is the best value for a rugged dependable printer. (Centronics parallel interface.)

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**1 Year Warranty**  
**150-170 CPS**  
**High Speed**



List \$699.00

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**S A L E \$299<sup>00</sup> S A L E**

**15½" Comstar 160+ High Speed** — This Bi-directional Tractor/Friction Printer has all the features of the 10" Comstar 160+ High Speed plus a wider 15½" carriage and the heavy duty electronics required for today's business loads. You can use large ledger business forms as well as standard sheets and continuous forms and labels. This is the best wide carriage printer in the U.S.A. (Centronics parallel interface.)

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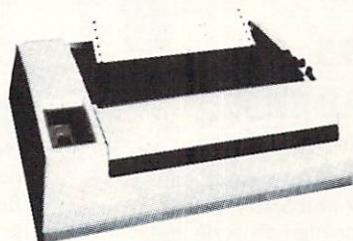
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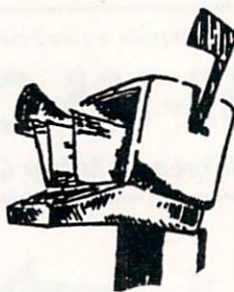
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# VALUE

## WHAT IS VALUE

val-lue (vāl yōō) that quality of a thing which makes it more or less desirable, useful, etc.

Value is something we constantly strive for in our role as consumers. But what is it really? Is it **price**? Sure, price is part of it. What about **quality**? Quality definitely plays an important part. Maybe, **good quality at a good price**? This is a step closer, but still not quite all. **Useful**? Of course. What good is quality, even at a good price, if you don't have a use for? So then let's say, "Value is: A useful, quality product at a good price."

## THE GOAL

Software Value: Useful, quality software at a fair price.

## THE PROBLEM

Every computer owner that progresses beyond the early stages, soon begins to add to his collection of programs. As soon as a disk drive is added, this collection literally explodes. Disks are like rabbits; start with a couple and soon they're everywhere! Since a disk can hold a bunch of programs, 10 or 20 disks can mean several hundred programs.

**HELP!!** To keep all those programs in order you need help. Programs to help you manage your program collection are called utilities.

A utility is a program that fills a specific need. Utilities usually concentrate more on getting a job done well than on being flashy. A collection of utilities is usually one of the first things almost every computer owner starts.

No matter what the main interest is (music, graphics, games, writing programs, etc.) all owners have the same basic needs (move files, copy programs, backup disks, etc.) to maintain their program library.

## THE PLAN

We wanted to assemble a collection of really good programs that would simplify maintaining your program library. Programs to cover every phase of this job. A collection that would serve as a solid foundation for anyone just starting their utilities collection, but also allow many people to improve the quality of the programs currently used for these jobs.

We also wanted to price the collection so that even if you only used 1 or 2 of the programs, you would still get your money's worth.

## THE PROGRAMS

**FAST FINDER:** A fast efficient way to maintain a current listing of all your programs.

- Alphabetical listing of all programs in your program library.
- Automatically adds the programs you choose from a disk. No manual entry of programs required.
- Assign your own 3 digit ID number, or use the disk's own ID.
- Find a program **FAST**. The first 2 or 3 letters of a name gets you a list of programs that match those letters. Your programs will be included. Average time - 1 second.
- List all programs with the same disk ID.
- List all programs to either screen or printer.
- Printed list is 3 columns wide. A few pages for a lot of programs.
- Add names from disk or from keyboard. Keyboard entry allows for adding Commercial disks that have altered directories that can't be listed. Also handy when you add 1 or 2 names to an already cataloged disk.
- Delete single programs, or all programs with a certain ID.
- Each list holds 1000 entries. Up to 5 lists available on 1 disk.

A program that will be of real use for anyone who uses a disk drive and owns more than a few disks.

**BULLET COPY:** A 4 minute disk copier that copies the whole disk in only 3 passes, using only 1 1541 disk drive, initializes as it copies. This program will save you a LOT of time making backup copies.

**HAPPY HOUSEKEEPER:** Makes moving programs and files from place to place a real snap. Move 1 program or a bunch. Large buffer. Make multiple copies without having to read source disk each time. Takes the drudgery out of disk library maintenance.

**ENVELOPE DIRECTORY:** Prints the directory inside a pattern that fits in the disk jacket. Makes it easy to keep the directory for each disk where it belongs, with the disk.

**DISK MAP:** Prints the directory giving Program name, size, load address, ending address and Track and Sector where program starts. Output to either printer or screen.

**DIRECTORY DOCTOR:** Loads a directory from a disk, re-arranges the order of the programs, then writes the directory back to the disk in this new order.

All these, plus several other programs will make this a disk you will reach for often. It will save you many hours to use for more important things.

## THE NAME

The collection: C-64 UTILITY CITY

## THE PRICE

Less than the price of a single program! We think software prices are too high. Hardware prices have fallen sharply in the last 2 years; software prices need to do the same. We have eliminated all the middlemen. By buying direct from us, we can increase the value even more. We even pay the postage!

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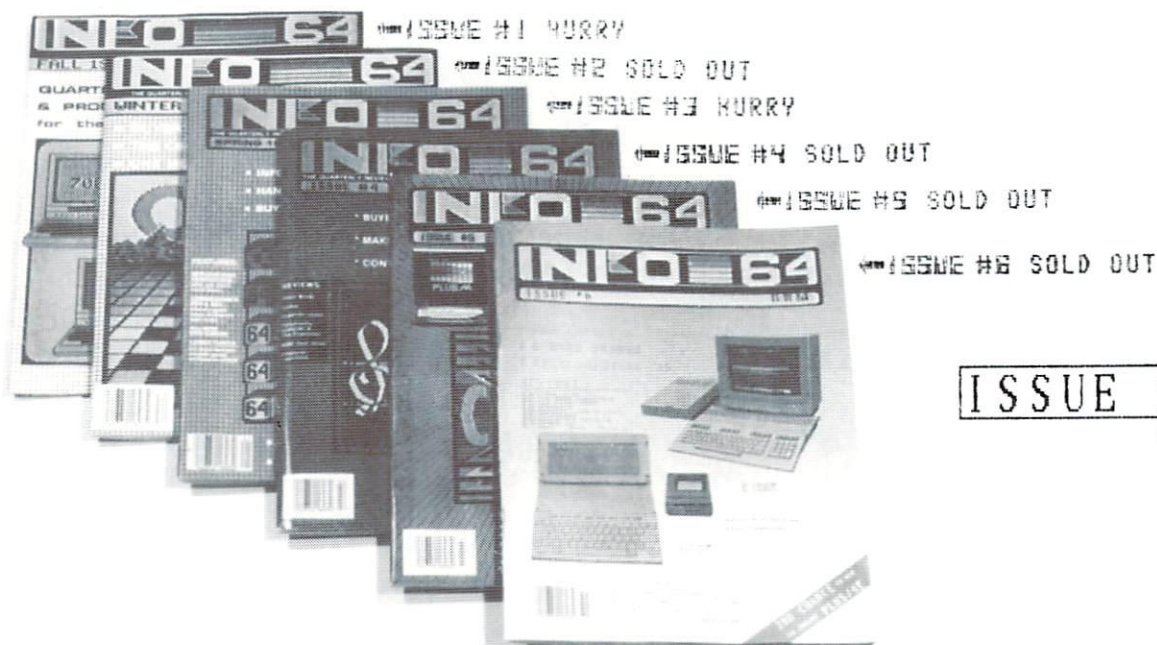
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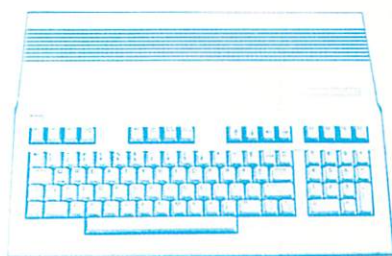
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## ADVERTISER INDEX

Academy Software.....	143
American Computer Warehouse.....	141
Aquarian Software.....	150
Artificial Intelligence Group.....	10
Basix.....	C4
Cardinal Software.....	142
Central Point Software.....	137
Clockwork Computers Inc.....	136
Comal Users Group.....	143
Comal Users Group.....	151
Compusoft.....	139
Computer Outlet.....	137
Concept 1.....	140
CGRS Microtech.....	138
Dynamax.....	139
DJ Software.....	142
Info Publications (ERG-BOARD).....	156
Info Publications subscriptions....	153
Info Publications back issues.....	152
Insta Ship.....	12
King Microware.....	154
M & M Software.....	142
Megasoft.....	C3
Microcomscribe.....	138
Microventions.....	143
Micro-W.....	C2
Mimic Systems.....	1
NiteOwl.....	138
Papertail.....	140
Parabola.....	137
Performance Micro Products.....	136
Progressive Peripherals.....	32
Protecto Enterprises.....	144
Protecto Enterprises.....	145
Public Domain.....	140
Quantum Software.....	143
Signal Computer Consultants.....	141
Starpoint Software.....	155
Synthware.....	10
SMA.....	11
SMA.....	136
T.I.E.....	31
UltraByte.....	138
Value Plus.....	147
Value-Soft.....	146
Wallstreet.....	140
Xetec.....	10

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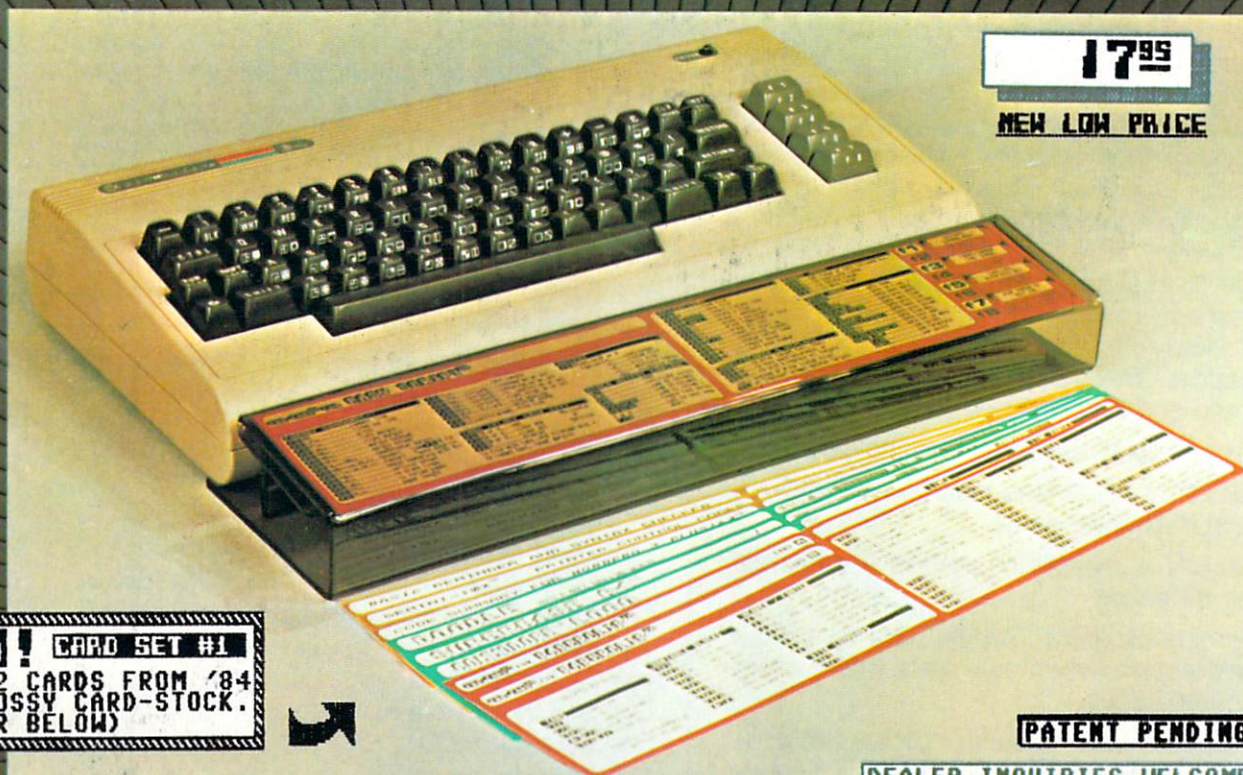
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# INFO

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- (01) List the types and makes of computer **HARDWARE** you **OWN** or **PLAN TO BUY** in the next year:

OWN PLAN TO BUY

```

[ ] [ ] Computer(s).....
[ ] [ ] Disk Drive(s).....
[ ] [ ] Monitor(s).....
[ ] [ ] Printer(s).....
[ ] [ ] Printer interface(s).
[ ] [ ] Other hardware.....

```

- (02) What SOFTWARE are you planning to buy  
(10=most / 1=least / 0=none)

Recreational	Accounting
Telecomputing	Utilities/Languages
Wordprocessing	Music
Database management	Graphics
Spreadsheet	Educational

- (03) Where do your software dollars & computing time go?  
(10=most / 1=least / 0=none)

\$	TIME		\$	TIME	
[ ]	[ ]	Recreational	[ ]	[ ]	Accounting
[ ]	[ ]	Telecomputing	[ ]	[ ]	Utils./Languages
[ ]	[ ]	Wordprocessing	[ ]	[ ]	Music
[ ]	[ ]	Database mgmnt.	[ ]	[ ]	Graphics
[ ]	[ ]	Spreadsheet	[ ]	[ ]	Educational

- (04) Which, if any, of the following **systems** do you plan to purchase in the next year (indicate multiple units with appropriate number):

Commodore C64	IBM PC
Commodore C128	IBM PC AT
Commodore Amiga	IBM compatible
Apple IIe	Tandy
Apple IIc	Other
Apple Macintosh	Don't know
Atari ST	None

- (05) About how much did you spend on computer products  
LAST year? \$

- (06) About how much will you spend on computer products THIS year? \$

- (07) For the following types of products, please name the one(s) you own or use. After each product, put a number (from 1 to 10) in parenthesis representing your degree of satisfaction with the product (10=extremely satisfied).

## \*\*\* SOFTWARE \*\*\*

Wordprocessing	:	_____	( )
Spreadsheet	:	_____	( )
Database Mngmnt.	:	_____	( )
Home Accounting	:	_____	( )
Bus. Accounting	:	_____	( )
Graphics package	:	_____	( )
Music package	:	_____	( )
Terminal package	:	_____	( )
Language	:	_____	( )
Utility	:	_____	( )
Copy System	:	_____	( )
Educational	:	_____	( )
Games (10 max.)	:	_____	( )

• \_\_\_\_\_ ( ) \_\_\_\_\_ ( )  
• \_\_\_\_\_ ( ) \_\_\_\_\_ ( )  
• \_\_\_\_\_ ( ) \_\_\_\_\_ ( )  
• \_\_\_\_\_ ( ) \_\_\_\_\_ ( )  
• \_\_\_\_\_ ( ) \_\_\_\_\_ ( )

\*\*\* Hardware, Misc. \*\*\*

```
Printer (Matrix)      : _____ ( )
Printer (Daisy)       : _____ ( )
Printer Interface     : _____ ( )
Monitor               : _____ ( )
Speed-Up product      : _____ ( )
extra disk drives     : _____ ( )
Graphics input        : _____ ( )
Joystick              : _____ ( )
```

- (08) How would you rate the following publications?  
(10=most / 1=least)

```

-----
S =subscribe          ! Gives Money's Worth
P =plan to subscribe ! Enjoyable to Read
O =often buy         ! Up to Date
B =buy sometimes     ! Informed
X =used to buy or sub. ! Useful
!                    ! Honest
!                    !
[ ] AHQY..... [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
[ ] COMMODORE..... [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
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(09) How many **OTHER** people usually read your copy of **INFO**? \_\_\_\_\_.

(10) From your observations over the past year, how does the **"New Commodore"** stack up in the following areas (Rate each from 1 to 10, 10=best):

- |   |  |
|---|--|
| <input type="checkbox"/> Dealer support   | <input type="checkbox"/> New hardware        |
| <input type="checkbox"/> Customer support | <input type="checkbox"/> New software        |
| <input type="checkbox"/> Advertising      | <input type="checkbox"/> Overall image       |
| <input type="checkbox"/> Keeps promises   | <input type="checkbox"/> Innovation          |
| <input type="checkbox"/> Listens to Users | <input type="checkbox"/> Product value       |
| <input type="checkbox"/> Service          | <input type="checkbox"/> Product reliability |

(11) Has Commodore's choice to initially introduce the **Amiga** via traditionally IBM & Apple magazines and market outlets made you:

- |  |
|--|
| <input type="checkbox"/> Less likely to buy an Amiga? (why?) |
| <input type="checkbox"/> More likely to buy an Amiga? (why?) |
| <input type="checkbox"/> No effect.                          |

(12) Indicate the percentage of **INFO**'s pages you would like devoted to the following **MACHINES**:

- |                                |                                    |
|--------------------------------|------------------------------------|
| <input type="checkbox"/> C64   | <input type="checkbox"/> C128      |
| <input type="checkbox"/> Amiga | <input type="checkbox"/> C128 CP/M |

(13) Indicate the percentage of **INFO**'s pages you would like devoted to the following **TOPICS**:

- |  |  |
|--|--|
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| <input type="checkbox"/> Editorial Opinion | <input type="checkbox"/> Hardware & Peripherals  |
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| <input type="checkbox"/> Music             | <input type="checkbox"/> Tutorials               |
| <input type="checkbox"/> Graphics          | <input type="checkbox"/> Robotics & Control      |
| <input type="checkbox"/> Business          | <input type="checkbox"/> Buyers' guides          |

(14) How would you like us to position advertising:

- |  |
|--|
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| <input type="checkbox"/> Grouped together at the back of INFO (like a reference section) |

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- |  |
|--|
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(16) Do you buy most of your computer products from:

- |  |
|--|
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| <input type="checkbox"/> Mail order            |

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- |                          |                                   |
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| <input type="checkbox"/> | Twice per year (our current plan) |
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- |                          |  |
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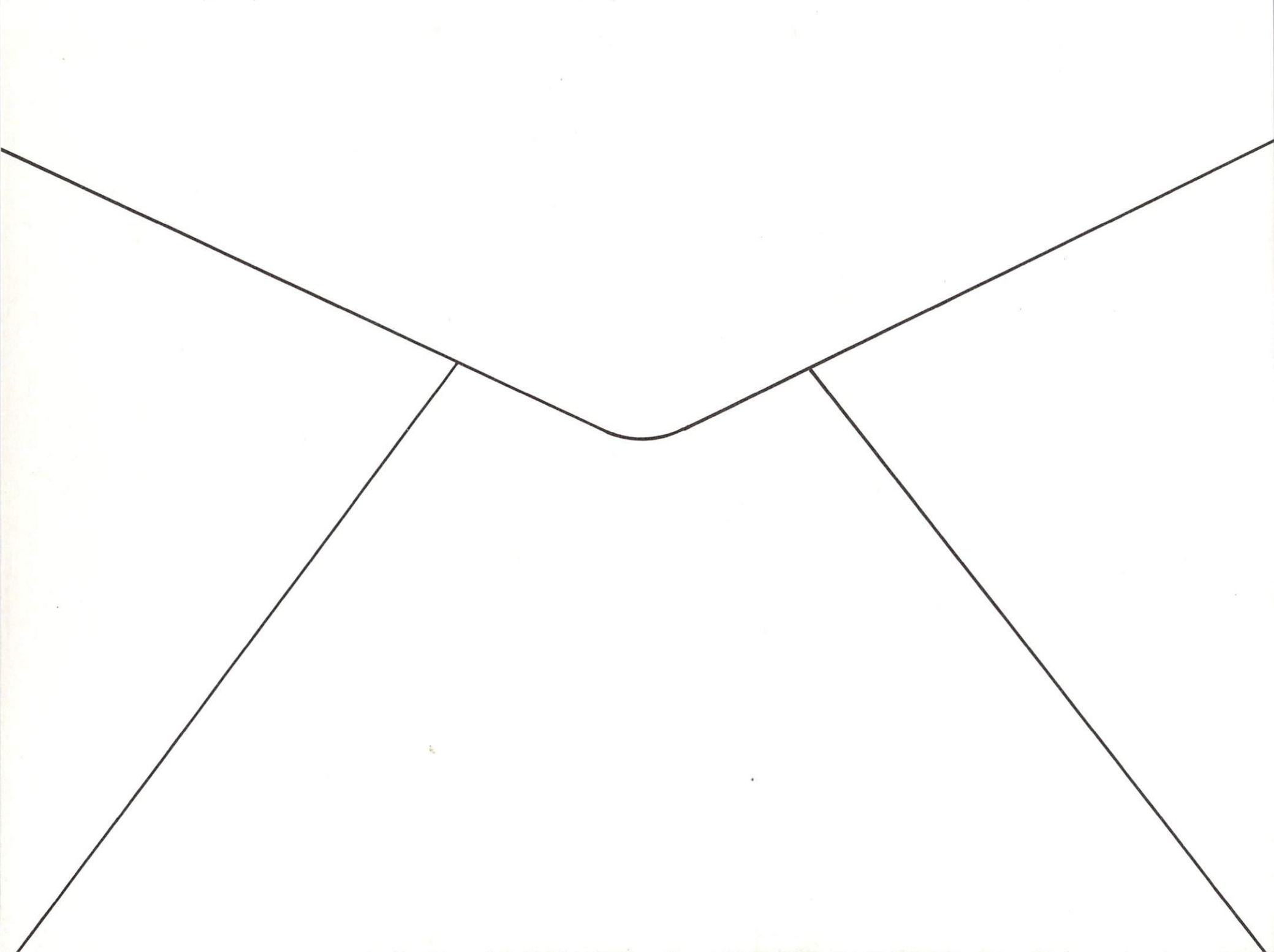
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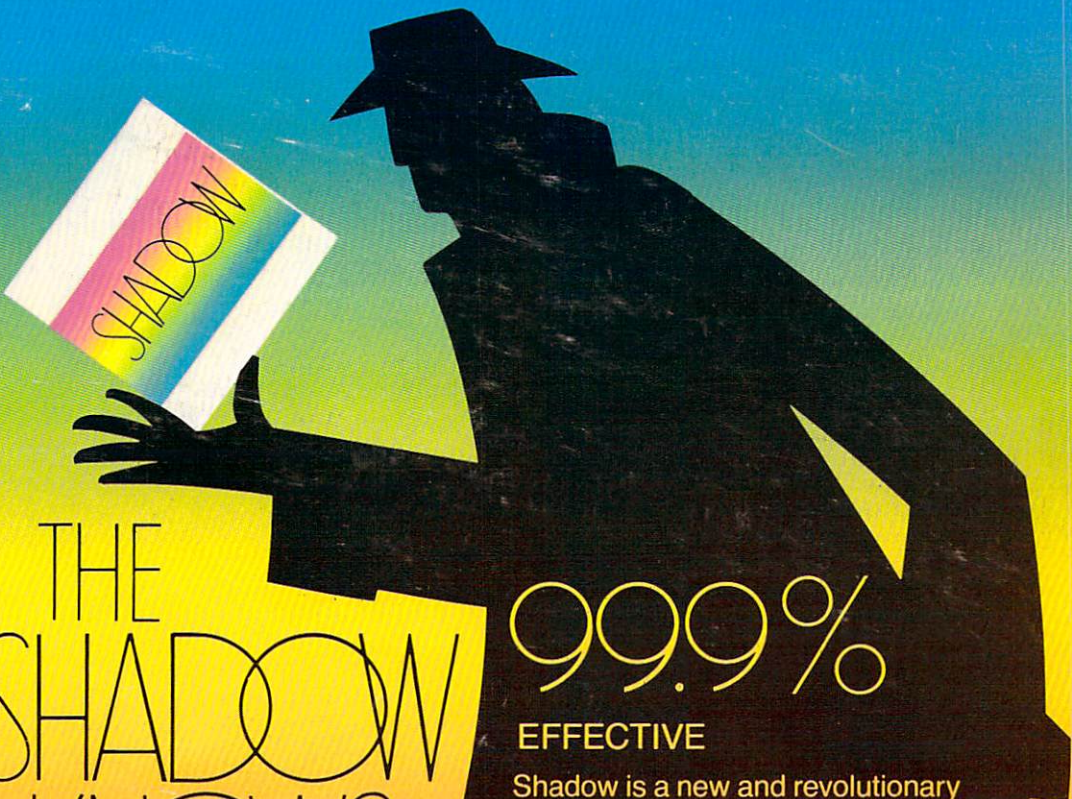
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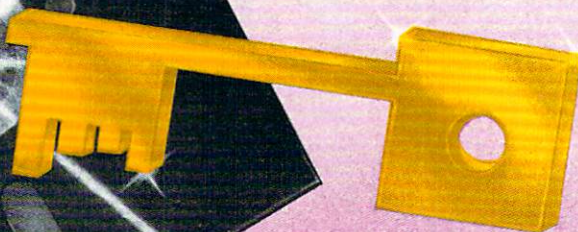
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